

CONSUMERS' RESEARCH

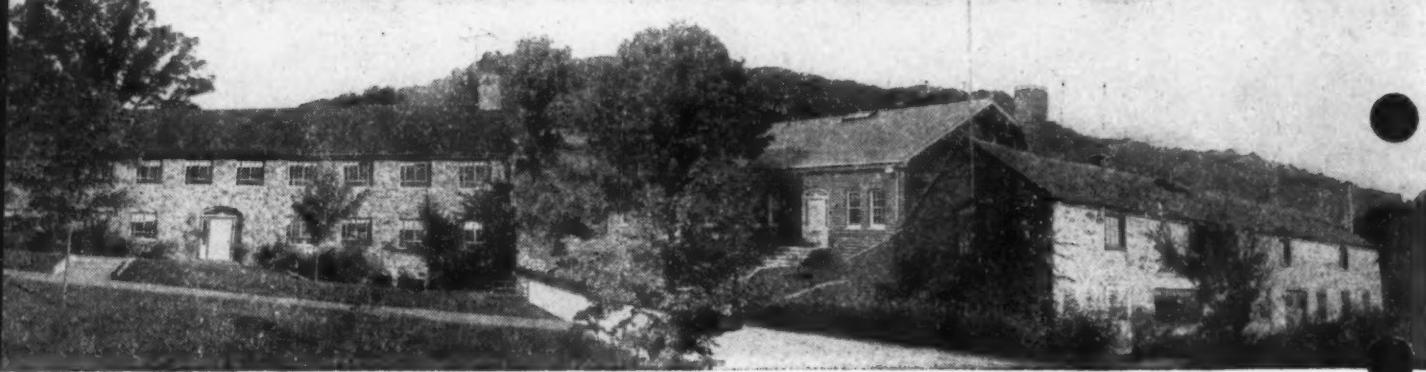


INCOMPLETENESS

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BULLETIN

June 1946

Off the Editor's Chest

HOUSING has been the favorite topic for countless articles, books, "movements," and propaganda organizations and drives in recent years. At one time economic and social theorists put forward the idea that people should be encouraged to live in communal housing units, rather than in individually selected and owned homes; thus, it was held, they would learn to accept economical "standardized" homes and room arrangements, to acquire "proper social attitudes" and group spirit and learn to "cooperate." There was another theory that factory workers should live in low-cost movable dwellings, such as trailers, so that they would not be tied to their jobs through the ownership of a house and thus be forced to accept lower pay when times were bad. The family with the mobile home would, it was argued, be free to move at a moment's notice to another region where the pay and working conditions might be better. Radical groups have held that the ownership of one's own home made for conservatism and lack of what they call a "progressive" point of view.

The current shortage of housing has been brought about by the prohibitions of government edicts and controls, which have made it almost impossible to carry on home building operations during the war years except in the vicinity of war plants and for war workers. A second factor has been the desire for homes of their own of veterans and others whose families "doubled up" while the men were in the Armed Forces and the women, in many cases, took wartime jobs in factories. As might be expected, there has been an extensive crop of theories

as to what should be done to remedy the situation and a host of new government regulations from bureaucrats who wish to appear to be "doing something" about the problem, if only to make newspaper headlines and acquire an official standing and reputation as "authorities" on housing.

One even gets the impression that somehow houses are to be magically *built* by this method. Thus, for example, we read in The New York Times, March 29, 1946: "New Law Doubles Veterans' Homes...Truman Approves Another 100,000 Temporary Units to Cost \$250,000,000." It's not that simple; no law will multiply the number of veterans' homes available. A lot of hard and very detailed work goes into the planning and building of a home, as anyone can testify who has gone through the experience.

The biggest obstacle at the present time seems to be that there are few if any carpenters, brick-layers and other building artisans available and little or no lumber, millwork, kitchen sinks, bathtubs, and other plumbing fixtures, sewer and drain pipe, and screen wire to be had—to mention a few of the more obvious and serious shortages. It is true that the official government agencies are "sitting on" stocks of needed production materials in various parts of the country, but even if these were released, there would still be stringent shortages. What is needed is more abundant production at the places where trees are cut down, sawed, and planed, and where kitchen sinks are manufactured. Orders and directives do not produce windows and

(Continued on page 22)

Scientific and Technical Experts and Editors: F. J. Schlink, R. Joyce, M. C. Phillips, A. R. Greenleaf, and Charles L. Bernier. **Editorial Assistant:** Mary F. Roberts.

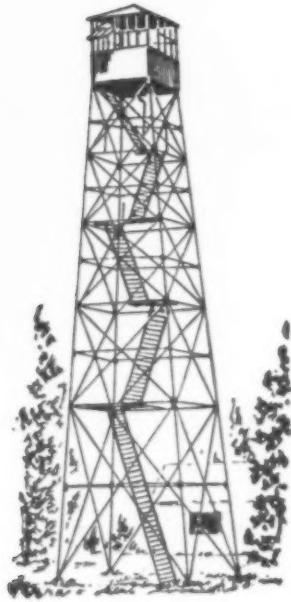
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*CR will, of course, gladly change addresses for men and women in the services as often as required by changes in station and other circumstances.

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The Consumers' Observation Post

SHOES OF GOOD QUALITY are hard to find and trade predictions point to a continuing shortage for nearly a year, reports The Wall Street Journal. For women, there will not be so many summer white, red, or blue shoes. The demand for children's shoes still exceeds the supply. Men, on the other hand, will find work shoes fairly plentiful, because veterans are using their GI boots as work shoes. The big demand for beefsteak is blamed for the shortage of kid and fine calfskin shoes. Because consumers want beef, live-stock producers are letting the calves grow up instead of marketing them as veal.

CARROTS have for a long time been considered an excellent source of vitamin A. As a matter of fact, it was believed that all of the carotene (the precursor of vitamin A, also called pro-vitamin A) could be converted into vitamin A. Recent experiments at the University of California under the leadership of Prof. Agnes Fay Morgan, however, indicate that vitamin A from animal products, such as butter and liver, can be used by guinea pigs six times as efficiently as the carotene from vegetables. Since the guinea pig is an herbivorous animal, he should be a most efficient user of vitamin A from vegetable sources. Dr. Morgan suggests that human beings, who are omnivorous, are likely to have even greater difficulty in utilizing the vegetable forms of vitamin A. This is another bit of evidence in CR's voluminous file of data indicating that American consumers need to eat more meat and fewer vegetables.

DRIVING THE FAMILY AUTOMOBILE is likely to cost more in the immediate future, as the billion and a half dollar federal program of highway building gets under way. Already at least four states have increased gasoline tax rates to secure the funds that are required to match the federal allotment. Idaho's present gasoline tax, for example, is 6¢ per gallon; Oklahoma's is 7-1/2¢. Trade groups have pointed out that although the selling price of gasoline has declined over the last twenty-odd years, taxes have increased so that the saving to the consumer has been cut down. The Texas Co. recently made a study of retail gasoline prices in 50 representative cities which showed a drop in the price of gasoline (in round numbers) from 25¢ in 1919 to 13¢ in 1940, 14¢ in 1945. Taxes per gallon went up from 6/100¢ in 1919 to 6¢ in 1945. In too many cases, these taxes are not reserved exclusively for highway improvement, but are utilized as a relatively painless method of raising funds for other state expenditures. The prices of goods consumers buy very often go down; the prices of the government services they must pay for go only one way - UP.

GOOD FLAVORING MATERIALS in ice cream are important for a high-quality product, and such materials are scarce at the present time, according to a trade expert. The trend now, in his opinion, is definitely toward mild and natural flavors since highly flavored ice creams leave an unpleasant after-taste. For vanilla ice cream, he believes that just enough flavor should be added to eliminate the flat taste of the mix. Canned and bottled fruits lack the fine flavor of the fresh fruit and more natural flavor, color, and texture can be secured from frozen fruits, which are prepared from tree-ripened products. At the present time, uncritical consumers may accept anything that is sweet if it is sold in the name of ice cream, but the time will come when a large part of the present output will be passed by as just not fit for man or beast.

* * *

SECONDHAND AUTOMOBILES are in such demand that it is expected to be nearly a year before the production of new cars makes any appreciable dent on the black market. It has been reliably estimated that at least 90 percent of the used cars sold in New York and Philadelphia are at over-ceiling prices, with the proportion for the country as a whole put at 70 percent. According to one report, individuals call up a dealer to ascertain the ceiling price and then proceed to make their own deals.

* * *

SURPLUS LENSES AND PRISMS from the Navy's 7 x 50 binocular now being offered in sets at around \$25 by so-called salvage houses, for those who wish to make their own binoculars, are a doubtful purchase for such a purpose. Even an exceptional mechanic would have considerable difficulty in making a proper binocular frame and structure (casing) for holding and encasing the optical elements, which must be held in place firmly and with great precision. The cost of making such a frame and casing would be quite high, greater indeed than the cost complete of a good commercially-made glass. Anyone who has not been trained as a physicist or engineer-specialist, or has not had broad experience in an optical plant, would have only a very slight chance of being able to assemble the component parts with sufficient accuracy to meet the close optical requirements of a good prism binocular correctly. While putting together a monocular telescope is a possibility, assembly of a good binocular from rejected or excess-stock binocular parts would be a practical impossibility.

* * *

SWISS-TYPE CHEESE made in the United States will require the use of milk from cows fed fresh hay rather than silage if it is to compete in flavor with the real Swiss, according to a recent study. It appears that the milk from cows fed silage is lacking in para-amino benzoic acid necessary to nourish the microorganisms required for proper curing of this type of cheese.

* * *

NO NEW MODELS OF AUTOMOBILES already produced this year, except Studebaker, are likely to appear during the current production year because present demand for cars is so great that the factories are under heavy pressure not to close down for the two months needed for retooling. As a matter of fact, there may be few, if any, 1947 models in some lines. Production of present models may continue through a large part of 1947, and then the change-over will be made to 1948 models. The top executive of one large company suggests that in view of present government restrictions, it will be too expensive for manufacturers to make improvements on their present models for some time.

* * *

LUMBER and other home building materials are difficult to obtain, yet large quantities were reported to be lying unused the latter part of last year in Army, Navy, and Marine depots in the vicinity of San Francisco. Observers reported that at one base alone there were 3000 carloads, estimated as enough to build 10,000 homes. In addition to lumber, there were plenty of roofing materials, steel pipe, cast-iron pipe including soil pipe, toilets, washbowls, and sinks by the thousands. Surely the government isn't planning to hold these materials for the next war, when they are urgently needed now, and when so many people have had to do without them for so long.

* * *

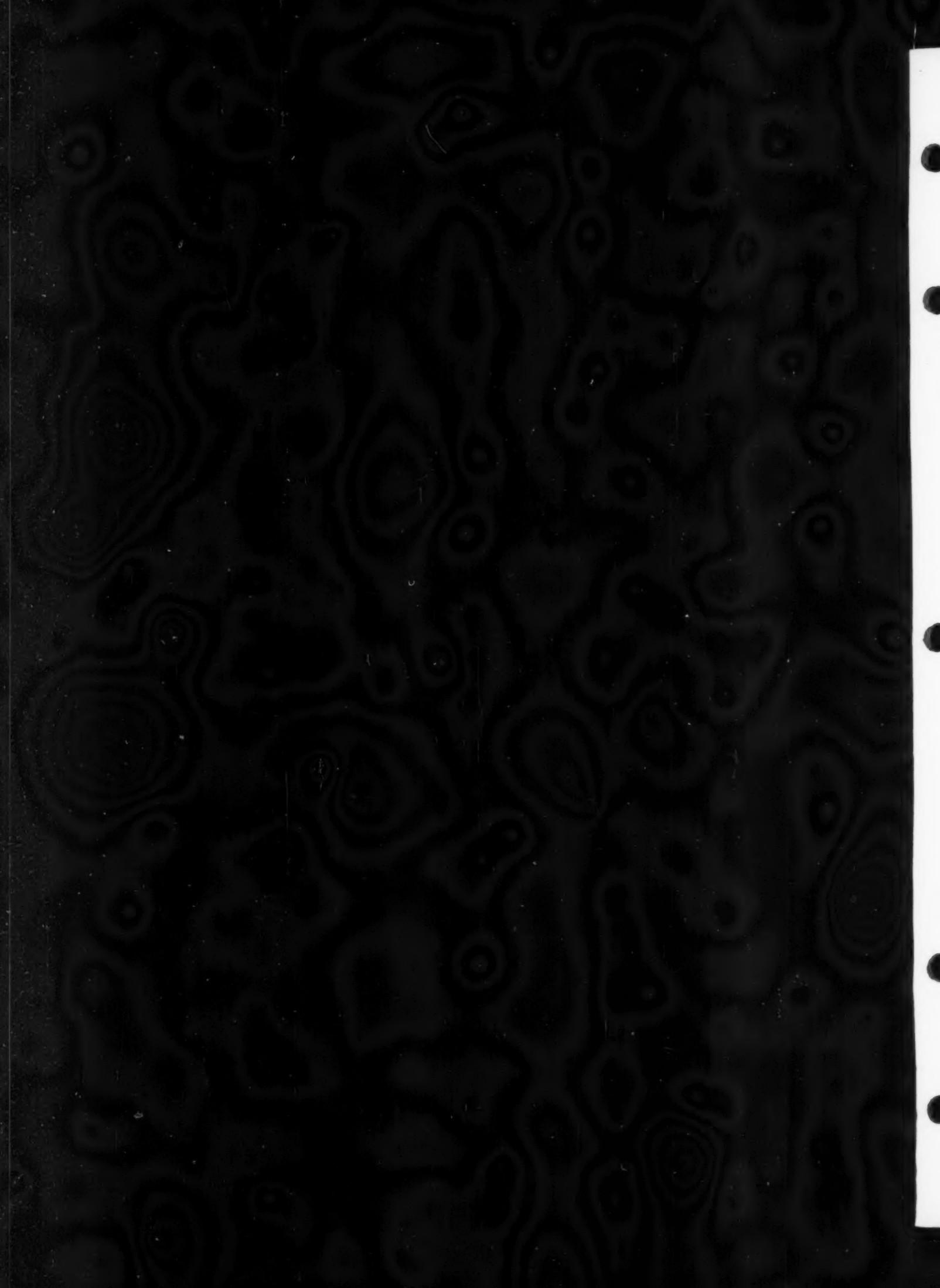
INSOMNIA in some cases is relieved by restriction of the use of salt in the diet, according to the findings of a recent study reported in the Journal of the American Medical Association. Observations were conducted on a group of 20 patients with pronounced insomnia, nervous tension, and anxiety by Dr. Michael M. Miller of Washington, D. C., who put them on a salt restricted diet. In all but three cases, pronounced or moderate relief from tension and insomnia were observed, after varying lengths of time.

* * *

CHEESE FANCIERS who are wont to make their purchases in large quantities when they find a particularly good piece, will be interested in the directions for keeping cheese at home given in an 1895 U.S.D.A. Yearbook. Placing it in a tightly covered stone jar in a slightly damp cellar, where the temperature is constant at 50° to 60°, is one suggestion. Where a slice for two or three days' supply has been cut off from a large cheese, the cut side should be rubbed with some heavy oil, or a mixture of beeswax and salad oil worked to the consistency of butter. Cheeses like Stilton and Edam, after they have been

(The continuation of this section is on page 29)





Plymouth Cars for 1946

ALTHOUGH outdone by *Dodge* in claims for the number of improvements made, *Plymouth* is not far behind with "50 changes, 34 mechanical and 16 appearance" some of which are enumerated in recently released publicity, which shows some marks of sales-promotion genius in its marshaling of many unimportant items to build up a sales story. A few changes are significant, and those are similar to the ones made on *Chrysler* and *Dodge* cars and reported in the April and May BULLETINS respectively.

In appearance the *Plymouth* is styled for 1946 in a way which might be called combining of old lines and the new lines adopted for *Dodge* and *Chrysler*. *Plymouth* front fenders are not faired into the front doors as on these two other makes of the *Chrysler* line, but the blending of fender lines into the body is quite acceptable. The first *Plymouth* cars produced had bumpers which appeared to be of 1942 design, but bumpers now extend fairly well around the edges of the front fenders; they are not as long as the "wrap-around" type used in *Chrysler* cars. (Since *Chrysler* cars are still being delivered to dealers short of bumpers, with dealers attaching all sorts of wood and angle steel substitute bumpers on cars delivered, while waiting for factory-made bumpers to be delivered later, the fact that *Plymouth* cars do reach the consumer with finished bumpers may be considered quite an advantage in these days of material shortages accom-



panied by desperate efforts of car manufacturers to attain some semblance of normal production rates.)

Contrasted too with cars first seen, the *Plymouths* on some dealers' floors appear to have been finished more carefully than were the first production jobs. Critical examination discloses far fewer evidences of patching of body work and other faults found in the earlier *Chrysler* cars.

One peculiar discrepancy in appearance was noticed. Whereas the grille and frontal trim were highly polished (chromium plate), the head-lamp rims were not so highly finished and appear to have the natural tint bordering on a grayish yellow which characterizes stainless steel. This difference of tone between rims and grille was quite noticeable on one of the *Plymouths* examined but may not be typical of others now being distributed.

Among the mechanical changes for 1946 that are similar to those made on other cars in the *Chrysler* line, are the re-adoption of aluminum pistons,

relocation of ignition coil and enclosed ignition wiring, use of the new type spark plugs, new exhaust valve material, improved front hydraulic brakes, and wider wheel rims. The starter button has been moved to the instrument panel and is of the convenient push-button type.

From a mechanical standpoint, possibly the most significant change is the adoption of universal joints equipped with needle bearings. Aside from the advantage of seldom requiring attention after initial factory packing with lubricant, these bearings, should give greatly increased bearing life, with freedom from rattling due to wear.

Plymouth cars are to be produced in De Luxe and Special De Luxe models as previously. The De Luxe line includes two- and four-door sedans, Club Coupe and Business Coupe. The Special De Luxe line is understood to include these body types, plus a Convertible and a Station Wagon. The top of the *Plymouth* Convertible is vacuum operated.



Disposable Diapers



THERE is, perhaps, no time when a young mother wishes to be freed more from the chore of washing diapers than when she begins caring for her baby shortly after its birth. Just at that time, a young infant needs frequent diaper changes, and the mother's strength is then least equal to the work of diaper washing.

For those who can afford it and who live in larger cities where one is available, a diaper washing service may be the solution. Prices vary from \$1.25 to \$2 a week, with an average of around \$1.60 a week, for a weekly allotment of about 70 diapers. This includes furnishing the diapers, and in some cases furnishing a container and a deodorant for sprinkling soiled diapers, and collecting diapers once or twice a week. A typical service in a large eastern city charges \$7.09 a month for a daily allotment of 12 diapers, \$9.28 for 24 diapers a day.

Most diaper services, however, are located in cities with 100,000 population or more, and this is not much help to mothers in the country or small urban community. For them, disposable diapers may provide the answer to the problem. Disposable diapers (*Chux*) will cost \$1.95 for 70 (an estimated week's supply); disposable diaper pads (*Bouncing Baby*) will cost \$1.10 for the same number and these amounts do not take

into consideration the cost of buying the panty holders, which, by the way, must be washed. The cost of a minimum supply of regular diapers (three dozen) will be \$7.50—a sum of money that would provide for only a four-week supply of disposable diapers.

Nevertheless, use of a laundry service or disposable diapers may not be much more expensive for some people than washing diapers at home. One apartment development dweller estimated the cost of doing a weekly laundry of diapers in the community washer and dryer as follows:

Charge for using washer (10c per use)	\$0.70
Charge for using dryer (10c per use)	\$0.70
Cost per week of laundering and drying diapers	\$1.40

This, of course, does not include the cost of soap, and takes no account of the extra time and work involved or the initial expense for the purchase of diapers.

There are occasions, such as traveling, when the convenience of using disposable diapers will outweigh all other factors. Nearly every mother will find some times when she will want to use disposable diapers rather than any other kind.

If used exclusively, disposable diapers are most practicable for very small infants

who need frequent changes. For larger infants, disposable diapers will probably be found unsatisfactory, since none of the samples tested combined adequate absorption and strength as do the usual cloth diapers. When satisfactorily absorbent, the disposable diapers were so constructed that they tended to bunch and wad up from the child's movements. When the disposable diapers were resistant to bunching, their absorbent properties were such as to make it very unlikely that suitable protection would be afforded.

Despite the name "disposable diapers," disposition of these diapers presents some problems. They should not be thrown into toilets to be flushed away, or plumbing stoppages may result.

The disposable diapers tested were of two types—the complete diaper and the disposable diaper pad. The complete diaper may be worn without a special holder while the pad must be fitted into a separate panty holder. All the listings are of the pad type of disposable diaper unless otherwise noted. The diapers were subjected to moisture penetration tests to determine the total moisture absorption, the percentage of moisture taken up (calculated to original weight), and the way in which moisture was absorbed. They were also given a type of soil resistance

test. Results of the absorption tests were given the greatest consideration in rating the diapers.

Diapers were also inspected for design and construction and the types of material used in their construction. As to the descriptive terms used in the listings: Loose absorbent material has been called a "batt"; paper which retains strength when wet has been termed a "water-stabilized paper"; gauze has been used to describe any plain woven open fabric; penetration indicates passage of dyed liquid used in tests through diaper to the surface of a blotter placed immediately beneath it; "full" penetration means that the area of soil on blotter was identical with that on diaper.

Ratings are cr46.

A. Recommended

Bouncing Baby (Sold by W. T. Grant stores) 50 for 79c. Composed of two sections of sheets of absorbent paper, a layer of cotton batt, and gauze. Absorption, rapid. Total absorption, adequate. Percentage absorption, good, best of those tested. Slight penetration of dye used in artificial soiling material, and full penetration of liquid (not judged significant since the pad will be used in a panty holder). Tended to disintegrate when soaking wet, but gauze surface was stable for ordinary use. 1

Roly Poly (Sears-Roebuck's Cat. No. 29—5120) 50 for 78c, plus postage. Absorption, rapid. Total absorption, adequate. Percentage absorption, good. Slight penetration of dye in artificial soil, full penetration of liquid. Same general construction as *Bouncing Baby*; see comments concerning that brand. 1

Wards (Montgomery Ward's Cat. No. 31—655) 50 for 78c, plus postage. Same construction as *Roly Poly*, and test results generally the same. 1

Chux (Chicopee Sales Co., New York City) 50 for \$1.39 (small size); 25 for \$1.39 (large size). This diaper did not require use of a separate holder. Composed of "waterstop" paper, section of absorbent paper, a thin cotton batt, and gauze. Absorption, rapid, and faster across diaper than lengthwise. Total absorption, large, due to size. Percentage absorption, a trifle low, due to non-absorbent backing. Slight penetration of dye from artificial soil, no penetration of liquid. Absorption across diaper resulted in some loss of water at edges. 3

Comfort (Riegel Textile Corp., N.Y.C.) 50 for \$1.25. Composed of two sections of sheets of absorbent paper, a layer of cotton batt, gauze, with threads laid lengthwise and cemented on outside (not gauze) surface. Absorption, rapid. Total absorption, adequate. Percentage absorption, good. Slight penetration of dye from artificial soil, full penetration of liquid. Similar to *Bouncing Baby*, *Roly Poly*, and *Wards*, and made under the same patent. See comments concerning *Bouncing Baby*. 3

B. Intermediate

Chix Disposies (Chicopee Sales Co.) 70 for \$1. Composed of two sections of absorbent paper, and two sections of "Masslin." The "Masslin" surface paper, according to the maker, is a non-woven fabric. It is quite stable when wet. Absorption, rapid, and very rapid across the pad. Total absorption, low. Percentage absorption, high, reflecting the very light weight of this pad. Full penetration of dye from artificial soil, some penetration of liquid. Absorption across pad resulted in loss of liquid from edges. There is doubt whether the waterproof holder could retain the water that would likely be lost in this way. 1

Kleiner's (I. B. Kleinert Co., N.Y.C.; Montgomery Ward's No. 31—653) 48 for 83c, plus postage. Composed of a section of absorbent paper and water-stabilized paper. Absorption, somewhat slow. Total absorption and percentage absorption, a trifle low. No penetration of dye from artificial soil, some penetration of liquid. 2

C. Not Recommended

Texlin (Regal Paper Co., Inc., Pulkaski, N.Y.) This diaper did not require use of a separate holder. Composed of water-stable paper, section of absorbent paper, and another layer of water-stable paper. Had a gauze strip at each end for pinning, and a rubber cord sewn down each side. Absorption, very slow. Total absorption and percentage absorption, low. No penetration of dye from artificial soil, or liquid. Water remained unabsorbed 15 minutes or more. It would seem certain that in use, this diaper would allow water to escape. 3

Training Pants

SOON after a child begins to walk, diapers are discarded and "training pants" are worn. At this age children grow very rapidly, so the little pants are usually outgrown before they are outworn. For this reason durability may often not be so

important in this particular article of clothing as are good design and workmanship.

To be of most satisfactory design, the garment should fit well and be comfortable. Compliance with the size standards of the industry is desirable,

since this tends to assure the consumer's receiving the wanted size when buying. Side seams are better if flat, for the raised type are apt to prove somewhat uncomfortable.

The cuffs of the leg openings take considerable wear, and

they should be firmly attached and heavier than the garment itself. Unhemmed cuffs are likely to start fraying earlier than hemmed ones. Of the samples tested, all had cuffs that were unhemmed on the inside, but all were more heavily overlaid with thread on the interior than the exterior surfaces because of the stitch types used.

The area covered by the crotch pad should be as large as possible, since this will reduce the chances of chill when the garments are wetted.

The wide, double-knit type of waistband is to be preferred. The faced type is good, but there is some danger of the facing shrinking more than the outside knit fabric. Buttonholes in the waistband are often useful.

The hem which holds the elastic should be sturdy and well sewn, for elastic can be replaced if the hem is well made. In some garments, the elastic is sewn into the hem. This has an advantage in that breakage of the elastic at one point is not too important, but replacement of elastic is much more difficult with this construction. In one garment tested, the *Rubens*, there was no hem and the elastic was sewn directly onto the garment. The elastic could not, therefore, be replaced.

Elastic with a relatively large number of strands, say 6 or 8, is likely to prove more durable in use than elastic with only a few strands.

CR's Tests

The study made for Consumers' Research included consideration of: Design and construction (including compliance with size standards, side seams, cuffs, waistbands, elas-

tic, and area of crotch pads); workmanship (including defects of assembly and ornamentation); and fabric (including thickness, color and kind of yarn, and yarn count). The last consideration was given less weight than the first two, since, as has already been noted, training pants are more likely to be discarded because of small size than because the material has worn out.

Ratings are cr46.

A. Recommended

E-Z (E-Z Mills, Inc., New York City) 39c. Cream-colored, with rayon-faced seams. Had sewn-in 6-strand cotton elastic in hem in back only. Design, somewhat below average; workmanship, satisfactory; fabric, very good. **1**

Fruit-of-the-Loom (Fruit-of-the-Loom, Inc., Providence, R. I.) 39c. White, with mercerized cotton ornamentation. Hem all the way around, with sewn-on rubber ribbon. Design, very good; workmanship, very good; fabric, below average. **1**

Burkland (Burkland Knitting Mills, Chicago) 50c. White, with mercerized cotton ornamentation. Had hem in back only, with loose (not sewn on) 8-strand rayon elastic. Design, above average; workmanship, slightly below average; fabric, good. **2**

Rubens (Rubens & Marble, Chicago) 50c. Cream-colored cotton-and-wool, with rayon-faced seams. Six-strand cotton elastic sewn on in rear only (no hem). Design, above average; workmanship, satisfactory; fabric, very good. The wool (content: 12½%) was judged not to be sufficient in amount to contribute significantly to warmth. Method of attachment of elastic is such that elastic cannot be replaced. **2**

Joyce (Distributed by Carson, Pirie, Scott & Co., Chicago) 70c. White, with plain cotton ornamentation. Had hem in rear only, with loose 6-strand cotton elastic. Design, very good; workmanship, satisfactory; fabric, thin, but double thickness used. **3**

Tyke (Wm. Carter Co., Needham, Mass.) 65c. White, with mercerized cotton ornamentation. Had hem in back only, with loose 6-strand cotton elastic. Band in front

had three buttonholes (desirable). Design, average; workmanship, very good; fabric, average. Stretch in the up-and-down direction was obtained in this garment by running the ribs of the seat and center panel horizontally. Since the elasticity of the fabric pulls against the waist, this might affect fit adversely and some difficulty in keeping the pants up might be experienced if the elastic should take much "set." **3**

Vanta Double Duty (Earnshaw Knitting Co., Newton, Mass.) 69c. White, with mercerized cotton ornamentation. Had hem in back only with loose 6-strand rayon elastic. Design, workmanship, and fabric, good. Judged to be the best garment tested. **3**

B. Intermediate

Wards (Montgomery Ward's Cat. No. 31-350) 33c, plus postage. Not listed in current catalog. White, with rayon-faced seams. Had hem in back only, with loose 6-strand cotton elastic. Design, above average; workmanship, satisfactory; fabric, poor. **1**

Nazareth (Nazareth Waist Co., N.Y.C.) 50c. Cream, with mercerized cotton ornamentation. Had hem in back only, with loose 8-strand cotton elastic. Design, below average; workmanship, slightly below average; fabric, good. **2**

Neslings (Minneapolis Knitting Works, Minn.) 55c. White, Swiss rib knit, with mercerized cotton ornamentation. Had hem in back only, with loose 8-strand rayon elastic. Design, good; workmanship, poor; fabric, average. **2**

Speed-on (E-Cut Knitting Mills, N. Y.C.) 55c. White, with mercerized cotton ornamentation. Band in front had three buttonholes (desirable). Had hem in back only, with loose 8-strand cotton elastic. Design, about average; workmanship, satisfactory; fabric, below average. **2**

Minneapolis (Minneapolis Knitting Works) 65c. Natural cotton, with about 10% wool and an ornamental course of rayon yarn, and with cotton ornamentation. Had hem in back only with loose 8-strand rayon elastic. Front band had three buttonholes and tabs. Design, average; workmanship, satisfactory; fabric, below average. **3**

C. Not Recommended

Sears (Sears-Roebuck's Cat. No. 29

—5775) 39c, plus postage. White, with mercerized cotton ornamentation. Had hem all the way around with loose 5-strand cotton elastic. Design, poor; workmanship, good;

fabric, poor. 1
Rivolettes. 50c. White, with cotton ornamentation. Had hem in back only, with loose 4-strand rayon elastic. Design, below average; work-

manship, satisfactory; fabric, below average with low thread count. This brand might merit a *B* rating. 2

The Diamond Phonograph Needle

THE search for a needle with an indestructible point that will give high fidelity reproduction and cause minimum wear of records on which it is played goes on with the perseverance of a Ponce de Leon seeking after the fountain of youth. New alloys and other new materials are constantly being experimented with. Use of the diamond point has caught the fancy of some experimenters and no doubt needles with diamond points will shortly be available for general use. The price is expected to be high, around \$50.

Continuing the series of wear tests which were summarized in CR BULLETIN, March 1946, CR purchased a diamond point needle with a tip radius of .003 in., from Moser Jewel Co., P.O. Box 171, Perth Amboy, N.J., at a price of \$12 (plus postage and insurance). It was first used with a regular pick-up (*Garrard*, crystal) having a needle pressure of 2.4 oz., on *Victor Red Seal* record 11-8762—*American Salute* (Gould. Boston Pops Orchestra under Fiedler. \$1). After 24 plays, slight wear of the record was observed in three zones. After 55 plays, the record showed noticeable signs of wear with concentric rings of grayish dust where fortissimo or heavy bass or percussion passages were re-



Fidelitone De Luxe precious metal type needle, .0025 inch radius (claiming 5000 plays) after 300 plays.



corded. Surface noise was very noticeable from 55 playings on. After 174 playings the record was badly worn and the entire record was covered with gray dust and loose particles that reflected light, dug up by the needle from the black shellac composition of the record. The needle tip, however, showed no sign of wear at this stage.

The same diamond point needle was next played on a new record of the same recording with the pick-up lightened to give a needle pressure of 1 oz. Only one narrow zone of wear on the record was observed after 27 playings; noticeable wear was evident after 80 playings; and there was severe record wear at 435 play-

ings. Loose particles of record material were not observed, however, at this number of playings with the lightweight pick-up. No evidence of wear on the needle could be detected when it was examined with a microscope.

Still a third run was made with a pre-war *Victor* talking record, No. 35577B—*The Liars Contest*, using the 2.4 oz. needle pressure. At about 50 playings, loose particles were observed on the record and the amount of these particles increased successively when observations were made at 70, 95, 150, and 190 playings. No gray streaked areas were noted. At the conclusion of this run, the needle was examined and very faint lines or ridges could



Moser diamond needle, .003 inch radius, after 1000 plays.

be seen under the microscope as shown in the accompanying illustration.

It would appear that a diamond point will fall considerably short of wearing forever, as many needle users have no doubt hoped and expected that it would. Its probable life before showing signs of wear, under heavy needle pressure, is something like 1000 playings; would no doubt be considerably more than that with a lighter pick-up. The amount of wear on records from the diamond point needle is large, on a par with that of needles with a

sapphire point which were found in previous CR tests to vary from severe wear at 100 plays with *Duotone "Star Sapphire," Walco "Tru Trac," Capitol, and Walco "Floating Jewel"* to severe wear at 250 plays with the *Admiral Lifetime Precious Jewel*.

The steel and chromium needles gave the least wear on records, but produced the most surface noise and gave the poorest reproduction. In the steel group, *Actone* was the best, followed by *Victor Red Seal*. In the chromium group, *RCA Victor* showed the best

resistance to wear with *Columbia* chromium next. It is estimated from CR's tests using a fresh steel needle for each 10 plays that a *Victor Red Seal, American Salute* recording could be played 250 times before any signs of wear began to appear. At 350 plays needle wear on records was appreciable and about as severe as with the *Admiral* at 250 plays or other sapphire needles at 100 plays. The jewel point needles, however, when not worn, gave the best musical reproduction with a minimum of surface noise.

Prism Binoculars

Each side of a prism binocular is a low-power astronomical telescope, in which certain types of prisms, usually Porro prisms, are used to reduce the length of the tube needed and so provide a handy, compact instrument. These prisms also act in such a way as to produce a correct, right-side-up image, rather than the reversed, inverted one of the simple telescope. The usual prism instrument provides a field of vision about three times that provided by an ordinary (Galilean) field glass of the same magnifying power.

Prism binoculars are usually available in a considerable range of magnifying powers. With most persons, the choice usually lies between 6-, 7-, and 8-power glasses, depending upon the individual's ability to hold a glass without sufficient tremor to impair definition.

For a magnifying power greater than 8, a support is required.

The amount of light which passes through a binocular is proportional to the area of the exit pupil; the diameter of this is equal to the diameter of the objective lens divided by the magnification. The diameter of the exit pupil of a 6-power binocular with 30 mm. objective lenses, for example, is 5 mm., and the light-gathering power is said to be the square of 5, or 25. In full daylight, the pupils of the eyes may be so contracted as to be smaller than the exit pupils of the binocular, in which case a binocular of considerable light-gathering power shows little or no superiority in brightness of image over one of less light-gathering power. In dim light, when the pupils of the eyes are expanded to a size greater than the size of the exit pupil of the

binocular, the superiority of the binocular with the larger objective lenses becomes plainly evident.

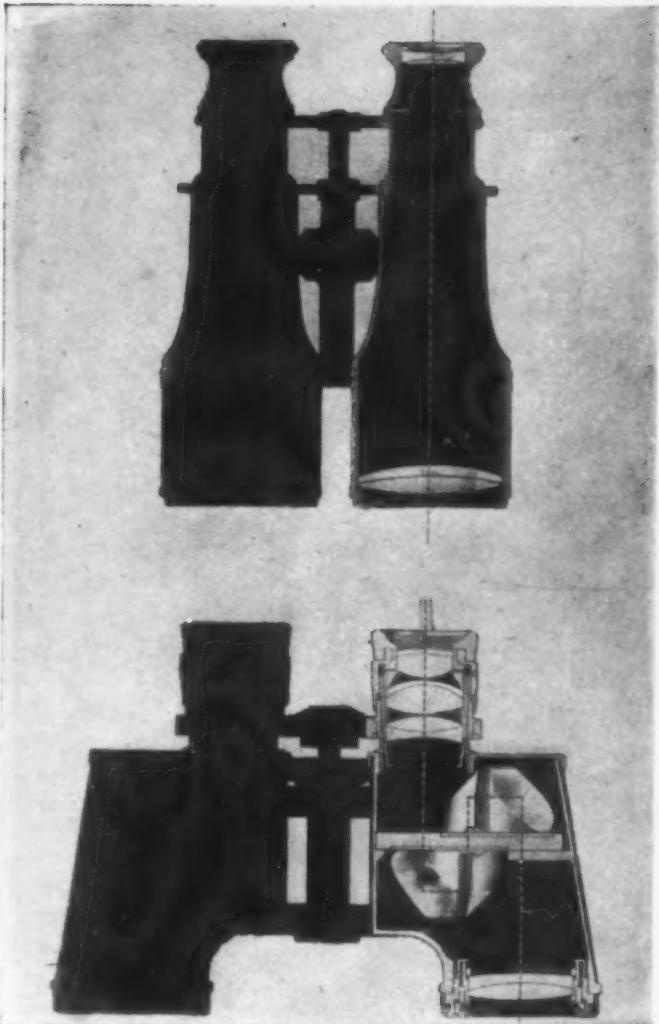
Stereoscopic vision is the ability to see things in three dimensions, as solid objects, rather than all on a plane as delineated in an ordinary photograph. This type of vision, essential for best and clearest perception of objects in the field of view, depends upon the angle formed by the light rays which pass from the object viewed to the eyes; since the average separation of the eyes is only about $2\frac{1}{2}$ inches, this angle is small. The lower limit of angle at which an object can be seen stereoscopically (or is stereoscopically resolved) is about 30 seconds¹ for the average person; with the average

¹ A second is an angle equal to $1/3600$ of a degree ($1/324,000$ of a right angle).

$2\frac{1}{2}$ inch eye separation, the maximum distance works out to be about 450 yards. Use of a field glass brings the apparent position of the object nearer to the eye; as a result of this the angle is increased, and the range of stereoscopic vision is therefore extended in proportion to the magnification produced by the glass. Because the objective lenses of a prism binocular are usually separated by a distance approximately double the separation of the eyes, the range of stereoscopic vision is increased to a value equal to about 900 yards multiplied by the magnifying power of the binocular. Increased stereoscopic effect not only gives a more "natural" appearance to distant objects, but enables a trained observer to estimate the distance of an object with greater accuracy.

Binoculars are made with separate focusing adjustment for each eye, or with a central focusing adjustment which operates both tubes, plus a separate adjustment for one eye (to adjust for eye inequality). The central focusing type is in some ways less desirable, because any maladjustment or looseness of the central focusing mechanism can cause optical misalignment; it is also somewhat more likely to permit entrance of dust and moisture into the optical system of the binocular.

The most serious defect in a binocular, as well as one of the most common, is optical misalignment. If the optical axes of the tubes deviate to a considerable extent from parallelism, the binocular cannot be used, but even a small deviation (which can be determined only by inspection on the optical test bench) will cause the user severe eyestrain and head-



Illustrations courtesy
Bausch & Lomb Optical Co.

Upper picture, standard construction of field glass of the type used before prism binoculars came into wide use after about 1893. Such glasses were known as Galilean telescopes or binoculars.

*Lower picture, prism type binocular, showing path of light. ***
Note how the use of prisms has lengthened the path of the rays and permitted shortening of the tube.*

ache if the binocular is used steadily even for a short time. If a binocular is out of alignment, the axes may converge or diverge in a horizontal plane, or one may point upward when the other is horizontal. Of these, the relationship which forces the eyes to converge is least troublesome, because one's eyes seem better able to endure being "crossed" than being forced to diverge either horizontally or vertically. For

a 6-power binocular, for example, reasonable tolerances are:

For convergence (horizontal component) **4.5 minutes²**

For divergence (horizontal component) **1.5 minutes**

For the vertical component **1.6 minutes**

² A minute is an angle equal to $1/60$ of a degree ($1/5400$ of a right angle).

With higher powers, the tolerance must be decreased. Misalignment can be caused by failure to maintain close fits and tolerances in the manufacture of prisms, lenses, or mechanical parts, or during the assembly of the parts into a complete binocular. It can also be caused in a binocular that was properly aligned originally by the slipping or rotation of a prism not securely fixed, by a jar sufficient to cause a slight displacement of any optical unit, or even by a trifling amount of wear in the hinges.

Because an intending purchaser cannot detect a defect in alignment, the purchase of a used binocular involves considerable risk. This applies particularly to the purchase of binoculars which have been used by the Armed Forces, for these have been subjected to far more severe treatment than binoculars in ordinary civilian use. During the war, many binoculars were made for the Armed Forces by firms which previously made no optical products and which are discontinuing such products with the end of the war. The purchase of an "orphan" binocular, even if it is in perfect condition, involves the possibility of being obliged to pay an excessive price for any repairs which may be required later, prices which may in some cases be so high that it would be better to discard the glass rather than to attempt its repair.

Some magazines have carried advertisements which offer a complete set of optical components for the 7x, 50 binocular made for the Armed

Forces. Even assuming that these components are perfect, they are not a good buy, because the possibility that they could be assembled in accurate optical alignment in some sort of makeshift housing is almost exactly nil, as has been mentioned in the *Observation Post* item in this BULLETIN.

The safest procedure in buying a binocular will be the purchase of one made by a regular optical manufacturer of good reputation, and carrying his guaranty. Glasses of obscure make are likely to be of lower power than their markings indicate. If surplus or used binoculars made by high-grade manufacturers are offered, which have been inspected and approved or fully reconditioned and guaranteed by their maker, they should be a good buy *if offered at a price materially lower than that of a new glass* of any well-known make. An attempt to secure a bargain in binoculars by any other method is attended by considerable risk.

If a binocular is wanted for only occasional or casual use, it may be possible to purchase a used one which will serve the purpose, provided all precautions are taken. The choice should be restricted to a product of one of the known high-grade optical firms such as Bausch & Lomb, Ross, Zeiss, Hensoldt, Busch, etc. No used binocular should be considered which shows any dents, bruises of the leather covering, or other evidence of having been dropped or bumped; such a glass is more likely than not to be out of alignment. The hinges should not be too loose, nor so

tight as to bind. Screw heads should show no evidence that the screws have been removed at any time, indicating tampering with the optical system, possibly in an attempt to correct some fault. A binocular in which any dirt or cloudiness can be seen by looking through each tube, from each end in turn, should be rejected. A purchase should be made only on the basis of a trial, which should give the prospective purchaser at least a day or two to make up his mind. Observation of a brick building or other structure which shows sharp lines and fine detail will permit an estimate of resolving power. If possible compare the binocular under consideration with one known to be first-class. The difference between the sharpness and clarity of the image of a good glass and a poor one is often startling when the two are used in succession, yet the poor performance of a bad glass may be hardly noticeable to the non-expert if he is not in a position to make the close comparison mentioned. The best rough test for misalignment is to take the binocular to a ball game or other sports event and to use it as continuously as possible, to determine whether eyestrain will be produced.

Many binoculars are now being offered with coated lenses and prisms. There is doubt whether this feature offers any material advantage in binoculars. (As our article in the May BULLETIN makes clear, the advantage of coating of photographic lenses is, for most users, of a minor character and not at all essential to good performance.)

The Birome and Kimberly Pens

As indicated in our article on the *Reynolds* pen in the February 1946 BULLETIN the public's willingness to pay high prices for fountain pens with novelty features was expected to bring other ball-tipped fountain pens to the market. Two such pens have now appeared. One is the *Birome* pen which has been sold by Macy's (the big department store in New York City) at a price referred to, with the adman's wonted indifference to money matters, as the "low-for-cash" sum of \$19.98. The other is the *Kimberly*, made by the Kimberly Corporation, Los Angeles, and sold by Bloomingdale's department store of New York City, at \$12.50 (and no doubt by many other dealers).

The *Birome* and the *Kimberly* are much more attractive in design and finish than the *Reynolds*, and have a more pleasing feel to the fingers. The *Birome* has the additional and novel feature of having a retractable point. This is pushed into place by a push button, and springs back into the barrel again at a light finger pressure on the clip.

The manufacturers of the *Birome* and the *Kimberly* seem to have had even more difficulty with their inks than the *Reynolds*, for the *Birome* pen does not seem to write so well at the start as the *Reynolds*.

Macy's
New York City, N.Y.C.U.S.A.
presents the famous
South American
Birome pen

* The only pen with
an air flow feed!

* The only pen with
a retractable point

It (a man we know has had his 2 years without having to refill it). The scientists at Macy's Bureau of Standards who tested the Birome pen assure us—and you—that it can't leak and will write at any altitude. It's a gem of a pen. And it's priced, in the Macy tradition, low-for-cash. Come, write, phone (Switchboard open 9 to 6). Stationery Department, Street Floor.

19.98

that it is indeed written
that it is different (e.g.
look at it). It is never
This pen has the effect
common to the other
ball-type pens tested,

The unevenness of the writing produced by the Birome pen and the poor legibility of the first few lines of writing are plainly evident in this illustration. This sample of writing was not exposed to fading by light, but was photographed as written.



This illustration shows the effect of a short time period of daylight or Fadeometer exposure on the ink lines made by the Birome pen. The darker areas show the ruled lines before exposure to daylight or shielded carbon arc; the lighter areas, from which the lines have almost completely disappeared, after exposure to light. Lines made with the Kimberly pen faded to about the same degree as those shown for the Birome.

(and that wasn't very well), and the fading propensities of the inks of both pens are very bad indeed. Lines drawn with the pens practically disappeared after exposure in a southwest window for 40 to 80 hours of March and April daylight, including something like ten to twenty hours of sunlight. Other samples were placed in a *Fadeometer* (a laboratory unit using an arc lamp for producing accelerated fading of dyes, etc.) and after 9 hours exposure in this apparatus very

marked fading was noted, so that words written with the pens would no longer be legible. The 9 hours in the *Fadeometer* is roughly equivalent to about 18 hours of June sun in the latitude of Washington, D.C.

Figures 2 and 3 give an idea of the "before-and-after" appearance of the writing with the *Birome* pen. Figure 1 shows the general uneven character of the writing with the *Birome*; the halftone does not exaggerate the unevenness of the impression, which is so un-

satisfactory, especially the beginning of the writing, that even the original writing was actually rather difficult to read.

NOTE: Samples used in the fading and writing tests for the *Kimberly* pen are not reproduced, as the results were essentially the same as those obtained with the *Birome* pen. (The *Birome* pen, however, did not "skip" as badly as did the *Kimberly*.)

Three other pens of this same general type are now on sale, the *Blythe*, *Eversharp CA*, and a *Reynolds "400"*, and these are being tested now. Our tentative findings are that, with the exception of the *Eversharp CA*, these give poor performance. As a writing instrument, the *Eversharp* was fairly satisfactory, but its ink faded badly, as with the others.

C. Not Recommended

Birome (Distributed by R. H. Macy & Co. Inc., Herald Square, New York 1) \$19.98, plus postage. Made in South America. Pocket type with retractable ball-bearing writing point. Writing very pale and uneven. Self-contained ink supply is of highly fugitive (light fading) dye. No instructions covering repairs or replenishment of ink supply accompanied pen, or notice of the cost of repairs or refilling, and no definite claim was made as to writing capacity of pen before refilling would be required.

Kimberly Californian C-101 (Kimberly Corp., Los Angeles. Distributed by Bloomingdales, New York City; Bullocks, Los Angeles and others.) \$12.50. Pocket type with burnished copper cap. Claimed to hold a 2-year supply of ink. Ball point and ink cartridge (brass tube) removable as a single unit, which is guaranteed and replaceable free within two years "Should this pen, for any reason, fail to write." Self-contained ink supply is of highly fugitive (light fading) dye. Writing uneven, like that of *Birome* and *Reynolds* pens. "Skips" badly at times, so that writing is hardly legible because of extreme non-uniformity of flow of ink to the ball.

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January 1946 through June 1946

(Vol. 17, No. 1 through Vol. 17, No. 6.)

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Servel
Gas and Kerosene
Refrigerators

ALTHOUGH electric refrigerators are being extensively advertised, consumers cannot buy them, or can buy only in rare cases, and then with little or no choice of make or model. About the only type of refrigerator not using ice that appears to be *available* now in any quantity is the gas-operated *Servel*, formerly known as the *Electrolux*. While CR has not made any recent tests of these refrigerators, we do not have reason to believe that the present models have been significantly improved over those tested in 1939. The models being manufactured now are the same as were produced just prior to the war.

The gas-burning refrigerating unit is an absorption machine which works by the heat of a small gas flame like that of a Bunsen burner as used in chemical laboratories. The principal claims in *Servel* advertising have been the silence of the unit and the fact that there are no moving parts to get out of commission. There are moving parts in the *Servel*, but there is no motor, compressor, or other continuously operating power unit; it does not follow, as the layman will tend to think, that the box will not require servicing. Reports from some users indicate that service calls are frequently

necessary, as often as every few months. Other users have reported very little servicing required other than general cleaning to remove carbon about once a year or at even longer intervals in some cases. There seems thus to be some want of uniformity in servicing requirements of the *Servel* unit. A typical trouble is the sootting-up of the burner, which reduces the effectiveness of the flame and may eventually result in the box failing to refrigerate properly if the weather is hot, and a high rate of refrigeration is called for on that account. When this occurs, an odor of partially burned gas is produced in the house, and the contents of the refrigerator are likely to be spoiled, of course, due to the impaired refrigeration effect.

CR in its last two tests of the *Electrolux* gas refrigerators did not find their performance good enough to warrant an *A* recommendation. The 1939 model, for example, was found to have inadequate refrigerating capacity at high room temperatures, and in comparison with mechanical refrigerators was slow in producing ice cubes (this latter point is, of course, of no particular importance for many users).

The cost of operation using manufactured city gas or bot-

tled gas was found to be high. For city gas, cost of operation was over twice and for bottled gas about four times that of a superior electric-motor-powered refrigerator¹. Operation with natural gas was about one-third cheaper than an electric refrigerator at an assumed rate of 5c per kilowatt hour. Thus, where good servicing can be counted on, purchase of a gas refrigerator would probably be desirable in circumstances where natural gas could be obtained very cheaply or where manufactured city gas was available at a very low rate (as may be the case in homes where the heating system is gas fired). In localities where the cost of gas is relatively high or bottled gas must be used, an electric-motor-powered refrigerator would be the preferable purchase.

Servel Refrigerator Using Kerosene

Servel refrigerators are also supplied for use with kerosene. A 6.6 cu. ft. *Electrolux* model of this type (pre-war price, \$300) tested in 1935 received a *B. Intermediate* rating. It was found to consume 4.9 pints of kerosene per day during test at 90°F room temperature.

¹ Based on: 540 Btu per cu. ft. city gas at \$1.25 per 1000 cu. ft. 1100 Btu per cu. ft. natural gas at 75c per 1000 cu. ft. Bottled gas at 8.6c per lb. of propane (40c per therm [=100,000 Btu]).

Report of Tests on Three Radio Receivers and A Phonograph Record Player

Two Table-Model Radio Receivers, 110 Volt, AC-DC Type, with Self-Contained Loop Antenna

B. Intermediate

Zenith, Model 6D015 (Zenith Radio Corp., 6001 W. Dickens St., Chicago 39) List price, \$26.50 (Zone 1). Plastic cabinet. Six tubes. Parts and workmanship, average to good. Probable ease of servicing, fair. Sensitivity and selectivity, fair. Spurious responses (undesirable) present at 590, 650, 900, 1010, 1210 kilocycles. Approximate acoustical range, 100 to 3100 cycles per second. Acoustic qualities as judged by listening test, good for this class of receiver. Output at 10% distortion, 0.6 watts (fair); maximum power output at 25% distortion, 0.9 watts (poor). As to shock hazard, satisfactory (leakage current 2.8 milliamperes, chassis to ground). 3

C. Not Recommended

Belmont, Model 6D111—Series B (Belmont Radio Corp., 5921 Dickens St., Chicago 39) List price, \$26.35 (Zone 1). Plastic cabinet. Six tubes. Tuning by knob and 6 push buttons. Parts and workmanship, average. Underwriters' and Radio Manufacturers' Association Approval. Probable ease of servicing, good. Sensitivity, good. Spurious responses (not bad) at 510, 610 kilocycles. Approximate acoustical range, 100 to 4000 cycles per second. Acoustic qualities as judged by listening test, fair (sounds flat). Output at 10% distortion, 0.7 watts (fair); maximum power output at 37% distortion, 1.6 watts (normal). As to shock hazard, unsatisfactory (leakage current 10 milliamperes). Hum level unduly high. Set was an early production model; performance may be improved in later production. 3

CONSUMERS' Research reported in its April BULLETIN on tests of nine of the new post-war radio receivers. These were the following: Emerson 507, Sonora RBU176, Motorola 65X12A, Telefone 100, Crosley 56TC, Emerson 505, Stromberg-Carlson News-caster 1100-H or 1100-HB (all rated *B. Intermediate*), and Admiral 6T01-6A1 and Minerva W119 (last two rated *C. Not Recommended*).

The series reported in the present BULLETIN includes the Zenith and Belmont table-model radios, a Motorola console model, and a Decca phonograph. Additional radio receivers, phonographs, and record players will be tested and reported on as fast as they can be purchased and the laboratory work completed and checked.

oratory label. Accessibility for servicing, fair. Sensitivity, good; selectivity, fair. Spurious response at 600 kilocycles (undesirable). Acoustical quality on listening test not bad at low volume. Approximate acoustical range 60 to 4500 cycles per second, with pronounced peaks at 80 and 2000 cycles, and a pronounced low point at 200. Power output at 400 cycles with 10% distortion, 7.2 watts (would be sufficient for most average-sized rooms). Maximum power output (at 33% distortion), 15 watts (ample). High distortion at 50 cycles, some at 100 cycles, both at 0.5 watts output. Hum level satisfactory (after correction of defective filter condenser). The set tested showed no leakage current, hence did not involve shock hazard. Set was poorly aligned and wiring was not properly executed; the cabinet was poorly constructed and thin.

Portable Phonograph Record Player, Non-Automatic or Manual Type

C. Not Recommended

Decca, Model 10 (Sold by Decca Records Inc., 50 W. 57 St., New York 19) \$76.15. 110 volts, a-c only. Wood and masonite cabinet, fabric (artificial leather) cover. Cabinet (closed) 16 x 17½ in., 11 in. deep. The loud-speaker is mounted in the cover which acts as a baffle to improve bass reproduction. This cover is removable, and through use of a 10-ft. cord, with a plug which fits into the base of the unit, the cover, with speaker, may be placed at some distance from the turntable and pick-up. Pick-up, Astatic, Model L 40A-603. Needle pressure, 1¼ oz. (undesirably high). Four-tube amplifier. Volume and tone controls combined with phono motor switch and amplifier on-and-off switch, respectively. Workmanship, aver-

Console Radio Receiver

C. Not Recommended

Motorola, Model 85K21 (Galvin Mfg. Co., 4545 W. Augusta, Chicago 51) List price, \$129.95. 117 volts a-c. Cabinet, wood; 40 inches high, 28 inches wide, 14 inches deep. Eight-tube superheterodyne. Self-contained loop antenna with provision for attachment of external antenna. Broadcast tuning range and short wave (5.5 to 12 megacycles); tuning by knob and six push buttons. Automatic volume control satisfactory. Two-gang condensers and apparently no radio frequency amplifier stage. Quality of parts: Chassis, average; cabinet, poor. Workmanship, poor. No Underwriters' Lab-

age. Probable ease of servicing, very good. Acoustical quality, good at low output; poor at high output. Approximate acoustical range, 90 to 5200 cycles (good). Power output 7.2 watts at 6% distortion, and 10 watts at 8% distortion (good). Maximum power output, 12.8 watts. As to shock hazard, satisfactory (leakage current, 1 millampere). Hum level, unduly high.

Motor rumble, excessive, but not reflected in acoustic output of speaker. This player had a number of weaknesses of design which put it into the C group. If these were corrected, it would merit an A. Recommended rating. The chief faults were: Instability (oscillation) in the amplifier; lack of inverse feedback circuit; power transformer runs rather hot; hum level exces-

sive (better shielding needed); motor rumble. *** *Musitron* (\$79.95) appears to be the same instrument as the *Decca* listed above except for motor and turntable, which in the *Musitron* provides for two speeds, 78 and 33 rpm. (The lower speed, used for so-called "transcription" records, would have very small interest for consumers.)

A Look at Some Hair Tonics, and Barbo Compound—a Dye

THE Connecticut Agricultural Experiment Station and two federal government agencies have reported chemical analyses on a number of preparations for hair and scalp treatment. *Barbo Compound* is used for imparting color to faded or gray hair. On the basis of the analyses, the active ingredients were judged to be free sulphur and lead acetate, a mixture well known for hair dyeing. Lead-sulphur dyes are considered among the definitely undesirable types of hair-dyeing preparations, on account of the possible toxic effects. *Barbo Hair Treatment*, a liquid treatment for the hair, is prepared from *Barbo Compound*, with bay rum and glycerin. In a *Quinine Hair Tonic*, sold by Rotham Sales Co., Inc., New York City, the claimed ingredients were alcohol, resorcin, fluid extract of pilocarpine, tincture of cantharides (a skin irritant), glycerin, and quinine bisulphate. The ingredient resorcin is one that, because of its staining action, should not appear in a preparation to be used on blond, gray, or white hair. Quinine and pilocarpine are both potentially dangerous substances for use on the scalp; besides pilocarpine is regarded as having

THE consumer is likely to assume that he can do his hair or scalp some good by applying to it regularly one of the widely sold and popular hair preparations. However, as the accompanying article shows, such applications, however frequent, are very unlikely to cause any improvement in the condition of hair or scalp; harm may, indeed, be done, instead. A striking illustration of the latter possibility occurred in the discovery by experts of the Federal Food and Drug Administration laboratory at Boston, that a lot of a hair preparation called *Hair Petrole* contained an "oil soluble butter yellow," one of the dyes (at one time freely used for food coloring) that has been found to have cancer-producing properties.

A product known as *Oliv-Tone* for hair and scalp was also found to contain, with water, mineral oil, and small portions of essential oils, the same yellow dye, and judgments of condemnation were entered and the product destroyed. At about the same time, this coal-tar product, butter yellow, was found to have been shipped by a dye manufacturer for use in the coloring of cosmetics. A well-known cosmetic manufacturer, Alexandra de Markoff, had used the same carcinogenic dye as a coloring agent in cleansing creams. The possibilities of chemical poisoning are so numerous and so subtle that, even with preparations not taken internally but merely applied to the skin and scalp, there will be serious practical dangers of injury to the consumer who takes the druggist's or patent medicine manufacturer's word or reputation as sufficient guaranty of products which he buys.

no value in producing hair growth.

In commenting on this hair preparation, the chemists reported that the word "tonic" in this and products of the same sort is "a vague term implying some general improvement or benefit that can hardly be justified by any definite or

acceptable evidence." This opinion, of course, might justifiably be expressed as to practically all "hair tonics," but the continued large sale of these preparations indicates that consumers with falling hair are among the large category of men and women who hope for some change for the better

in respect to appearance or health, by using something out of a bottle, without being aware of any particular reason why improvement should be expected. Referring to a list of the various drugs used in preparations for the treatment of the hair and scalp (cantharides, beta-naphthol, quinine salts, resorcin, sulphur, pilocarpine), the chemists comment, "The value of these, or of any of them, for promoting hair growth appears to be highly questionable."

A Hair Preparation with Olive Oil and Quinine marketed by Lander, New York City, was found on analysis to contain alcohol, quinine bisulphate, beta-naphthol, olive oil, and other fatty-acid ingredients. Beta-naphthol is akin to carbolic acid, and hardly seems to be a safe substance for regular or long continued use on skin or scalp. According to the makers' claim, glycerin was also present.

Hicks' Quinine Hair Tonic was found by chemists of the Federal Food and Drug Administration to be about 60% alcohol and about 1% salicylic acid, with quinine, water, and perfume. This product was falsely represented by its promoters to be a remedy for eczema, alopecia (loss of hair), dandruff and itching scalp, and there was a claim, entirely unjustified in the case of any so-called hair tonic, that the product would promote the growth of hair.

Kotalko is another "hair tonic" which was compounded essentially of sulphur, pilocarpine, resorcinol, and a "camphoraceous oil" in an ointment base. The labeling falsely claimed that the product would discourage excessive loss of hair and strengthen existing growth

of hair and that it was an effective treatment for dandruff, thin, brittle or falling hair and baldness. The dangers in use of two of the ingredients were mentioned in an earlier item.

Daigneault's Eau de Quinine Hair Tonic was chiefly alcohol and water, with small amounts of quinine, perfume, and coloring matter. The label made the usual misleading statements regarding prevention of falling out of hair and promoting its growth. Daigneault (Malone, New York) sold another misrepresented product called *Individual Quinine Hair Treatment*, packaged in "Tube No. 1" composed essentially of mineral oil, a small amount of a "fatty oil," and carbolic acid, and "Tube No. 2" which was essentially soap and water. There are evidently nice profits to be made in the hair tonic business, at least till someone gets to checking up on claims and ingredients.

Renair Pomade was an ointment containing betanaphthol and volatile oils incorporated in a greasy base. Promoters of this product falsely alleged that it would produce beneficial effects in treating baldness and falling hair.

Ultrasol, of the famous "Post Institute," was found by the government to be misbranded because of its various claims for promotion of luxuriant hair growth, removal of dandruff, help in checking hair loss and combating of premature graying. The *Ultrasol* Fluid was found to be essentially a light mineral oil, a small fraction of one percent of oxyquinoline, and some organic substances, with perfume.

HQZ Hair and Scalp Oil, sold by HQZ Laboratories, Inc., and advertised by Rufus Rhoades & Co., both of San

Francisco, was represented as penetrating into scalp pores or hair follicles, and if used in combination with *HQZ Shampoo*, as able to rejuvenate the hair and solve dandruff problems. HQZ's promoters have agreed with Federal Trade Commission to discontinue such claims and to cease representations that they own or operate a laboratory.

Indian Antiseptic Hair and Scalp Stimulator (Adolph F. Frick, San Francisco) was misbranded because of representations that the product was of Indian origin and would be effective in stimulating hair and scalp, treating dandruff, falling hair, etc.; also because the label did not bear the common or usual name of each active ingredient. *Indian Antiseptic Hair and Scalp Stimulator* was composed essentially of small proportions of a phenolic compound (a substance akin to carbolic acid) and free ammonia, alcohol, water.

En-Ex (En-Ex Co., Cleveland) sold as a psoriasis "cure" and also recommended by its promoters for falling hair and dandruff has been in trouble with the Federal Trade Commission. The Commission found that *En-Ex* was not a cure or remedy for falling hair; that with dandruff it might in some cases be helpful temporarily, and in other cases might aggravate the condition. It was further found that *En-Ex* was unsafe to use without warning that it may cause irritation of the skin and a further warning that it must not be allowed to come into contact with the eyes or any mucous membrane of the body. *En-Ex* was found to consist of about 20% coal tar, 10% soap bark, and 70% isopropyl alcohol (rubbing alcohol).

FOR those who maintain scrapbooks and photograph albums a good adhesive paste or cement is essential. To be satisfactory, a paste for photographs or clippings must not cause the article being mounted to wrinkle, nor should it cause stains. The bond should be strong and remain so for many years, or permanently. It should not be subject to damage by molds. These properties are particularly important in mounting clippings from newspapers and magazines, which because of the poor paper necessarily used in many cases, become brittle and yellow with age, and at the same time are usually irreplaceable, for most people.

Preliminary tests on a number of samples of pastes show that most of them will be fairly satisfactory for mounting photographs and newspaper clippings to bond paper and to scrapbook paper. In the tests, the mounted specimens were exposed in an attic for about 1 year where for part of the time it was very hot, and duplicate samples were exposed on a roof outdoors protected by glass for the same period of time. Six

of the brands were considered satisfactory enough to warrant recommendation. The seventh, while satisfactory on one type of scrapbook paper was not so satisfactory on others and on bond paper. Prices in parentheses are per oz., or fl. oz.

A. Recommended

Scrap Book Paste, No. 54½ (Distributed by G. C. Murphy, 5-and-10-cent stores) 10c for 7¼ oz. (1.38c). Believed made by Le Page's. 1

Carter's Paper Cement No. 807 (Carter's Ink Co., Kendall Sq., Boston) 10c for 2½ oz. (4c). Label statement: "For use in place of rubber cement. Not removable like rubber cement yet excess can be cleaned off

with a damp cloth. Will not wrinkle paper. Slow drying so that mountings can be moved around a few minutes after sticking." 2

Cico Liquid Paste No. 727 (Carter's Ink Co.) 10c for 2½ oz. (4c). Label claims "Especially good for sticking paper to paper, cardboard, glass, wood. Sticks best when spread thin." 2

Higgin's Vegetable Glue No. 256 (Higgins Ink Co., Inc., Brooklyn, N.Y.) 25c for 8 fl. oz. (3.1c). Label statement: "An exceptionally strong adhesive unequalled for sticking paper or cloth to paper, wood, leather, glass or metal. NOT guaranteed for uniting wood, glass, crockery or metal alone, nor against discoloring tinted papers." 2

Le Pages White Paste (Le Page's, Inc., Gloucester, Mass.) 5c for 2 oz. (2.5c). "For all paper work." 2

Kodak Photo Paste (Eastman Kodak Co., Rochester, N.Y.) 15c for 2 oz. (7.5c). Claimed to be "A first-quality white paste, suitable for photographic, office, and library work. Will not cockle or stain prints or mounts. Remains fresh and is always ready for use." 3

B. Intermediate

Le Pages Liquid Paste (Le Page's Inc., Gloucester, Mass.) 10c for 2½ fl. oz. (4c). Was found to give less satisfactory results than other brands tested when used for mounting photographs on bond paper and on one type of scrapbook paper, also with newspaper clippings on two types of scrapbook paper. 2

Luminous Paints and Tapes

Magi-Glo is a luminous paint that has been advertised and sold on mail-orders sent to the manufacturer; it is designed to be used to produce a faintly visible glow on a surface upon which it is applied. A *Magi-Glo* kit consists of a half-ounce of pigment, a fluid ounce of sealer, and a fluid ounce of vehicle—the combination selling at \$1.29, by mail from *Magi-Glo* Co., 356 W. 63 St.,

Chicago 21. The pigment was identified as calcium sulphide; the sealer, a varnish dissolved in xylene; the vehicle, a varnish dissolved in naphtha, similar to the sealer but considerably thicker. Unlike materials whose glow depends upon the presence of a radium compound, *Magi-Glo* does not glow of itself, but must be first "activated" or irradiated by daylight or artificial light. Im-

mediately after exposure to light ceases, the after-glow begins to decrease in brightness. This process will continue until the glow is no longer visible, but the luminous area may be expected to retain sufficient visibility to be useful to the dark-adapted eyes for as long as 10 to 12 hours; it may be visible after as much as 24 hours to the dark-adapted eye observing at close

range. (The eye acquires greatly increased sensitivity to weak light when the observer has been in darkness for about 30 minutes. See comment on this point hereafter on the *Nite-Glo* product.) According to trade sources deemed to be reliable, this type of luminescent substance may be expected to give up to 6 months of use under severe outdoor conditions but a much longer life can be expected for indoor use. The material does not "wear out" in the sense that continual exposure to light will cause loss of activity. However, chemical changes due to gases in the air will in time cause a diminution of the luminescent effect. It is important not to apply the product directly over lead or lead-painted surfaces; for such surfaces, the sealer must be applied before *Magi-Glo* is painted on.

Among the uses for which luminous paint products are recommended by their makers are the marking of the position of light switches, fuse boxes, pullcords, railings, doorknobs, fire extinguishers, telephones,

adhesive tape which can be affixed to articles as safety markings, articles of photographic darkroom equipment.

A product in the form of a phosphorescent non-adhesive fabric tape $\frac{3}{4}$ in. wide is available under the name of *Nite-Glo*. This is sold at 15c for a roll 48 in. long. It is claimed that *Nite-Glo* will shine all night when exposed to daylight or electric light for 30 seconds. A trial of the product was made to determine about how long it would retain its visibility. After exposure to an electric light bulb for 30 seconds, the recommended time, it was visible up to 20 minutes. (However, if the eyes were permitted to become dark-adapted, there was visibility for several hours, long enough to give some visibility overnight, to dark-adapted eyes. After exposure to bright sunlight for one minute the tape was still visible the following day [after 24 hours] — but only after about 10 minutes' dark-adaptation of the eyes. The tape would be almost useless in any application where fair to good visi-

bility would be necessary in circumstances where there would not be opportunity for the eyes to become sufficiently dark-adapted, as for instance, just after the bright lights in a room had been turned off as by a powerline failure, blowing of a fuse, or other similar cause.) This would be equally true of *Magi-Glo*.

Suggested uses according to the label of *Nite-Glo* are for window sills, fire extinguishers, first-aid kits, light switches, etc. It can be sewn, tied, tacked, or glued in place.

It should be noted regarding luminous paints, tapes, etc., that the ingredients are poisonous in the sense that they could do harm were they to get into the mouths of young children or others; hence any storage or utilization of the material must be done with this hazard in mind. It would seem, however, that for normal household use, there would be no reason to fear harm on account of the toxic character of the ingredients — chiefly the sulphides which furnish the luminous quality.

Off the Editor's Chest

(Continued from page 2)

doors, 2 x 4's, lath and plaster walls, or install stoves, furnaces, and piping.

The shortage of skilled building craftsmen is designed to be remedied or short-circuited by a grandiose scheme of federally-subsidized prefabricated housing. One reporter describes one of the aims of the national housing program in this respect as "the creation of a new industry that will surpass the record of the old house-building industry in all but its palmiest days." Chester

Bowles, while he was head of the OPA, recommended that the government place large orders with manufacturers of prefabricated housing at prices which would "assure the producers in this field a generous profit"—a curious expression from a man who has spoken forcefully on dozens of occasions against the whole idea of "generous profits," one might almost say, against any profits at all, for business.

One effect of this intensive program of promotion of prefabri-

cated housing is seen as what one journal refers to as "a strategic opportunity to break the A.F.L.'s grip on the [building] industry" and provide an opening wedge for the C.I.O. It is certainly true that the building trade unions are responsible for a great many practices that are greatly disadvantageous to consumers and interfere with efficiency, economy, and the conservation of scarce materials and manpower. Building code requirements often are formulated for local unions'

benefit. In Chicago, for example, the use of prefabricated housing to meet war emergency needs was rejected by the city's aldermen because they were reported as holding that they could not afford to "stir up the unions." In that same city the carpenters' union bans the use of factory assembled cabinet work; the glaziers require that extra costs be piled up by placing and putting all windowpanes on the job; the painters refuse to permit the use of spray guns; and the construction unions refuse to handle ready-mixed concrete except at very high rates. Volumes could be written exposing such practices, which are often hardly to be distinguished from plain racketeering, and, which are estimated as increasing the total cost of a house by as much as 40 percent.

Eliminating such charges and bottlenecks would be quite as effective in reducing the cost of a veteran's new home as "the

creation of a new industry" to do the job and it would be a lot easier on the taxpayer's pocket-book, which should not always be treated as though it were inexhaustible. Unfortunately, the needed reforms would require considerable fortitude and hard work and the ability to act in behalf of consumers' welfare in spite of the unfavorable publicity from various pressure groups that would undoubtedly result.

Cautious recognition of the need for doing something about the building codes and the restrictive union regulations was voiced by a spokesman for the Commerce Department who pointed out that not only obsolete building codes, but restrictive agreements between management and labor stemming from the make-work days of the depression—as the government official delicately put it—were hindering construction. It will take a lot more than such wrist slapping to elimi-

nate well-established, lucrative toll-taking practices by labor and business, and we should probably not expect too much in that direction in an election year. It is more fun for those in official positions to go through the verbal motions of setting up a new industry with taxpayers' money for the benefit of some favorite industrialist or labor group. Any one who really wants useful *action* (production) by the building and building supply industries—which are the only agencies that can get houses built—and opposes subsidies with which to play house-building is likely to be accused of being a most unpleasant character who is content to let our war heroes and their families sleep in tents in the park. The hard facts of the matter are, however, that the veterans won't get housing from orders and directives, or through any number of laws or regulations asserted to "double veterans' homes."

Playing Cards

FOUR out of every five families—and maybe as many as nine out of every ten—keep playing cards in their homes, either for their own amusement or for the amusement of friends. In many homes, several decks are to be found, "old decks" which are worn and perhaps dirty, and "new" or "good decks" which are used for social occasions when clean, attractive cards are as much in order as clean china and glassware.

As most card users know, cards differ in their ability to withstand the effects of wear caused by playing; yet everyone wants cards which have a pleasing crisp feel, and will shuf-

fle, riffle, and deal easily, and will continue to do so for many games of rummy and solitaire and many rubbers of bridge.

No one knows where card-playing originated. The invention of cards has been accredited to the Chinese, Arabs, Egyptians, and Indians. It is certain, however, that playing cards have been known for many hundreds of years, and that card-playing had become quite common late in the 14th Century. The number of suits, the number of cards in a suit, and of course the number of cards in a pack were changed from time to time, and there are still differences today.



Some decks (tarot decks) still in use in some parts of France, Germany, and Italy contain 78 cards, four suits of numeral cards and 22 emblematic cards. Packs of Italian playing cards consist of 40 cards, the 2's and 3's ranking above the ace, and the 10's, 9's, and 8's omitted. The usual deck found in this country consists of 52 cards with a joker additional. In the present test, all decks were of this type, although one deck of the *Barclay* brand examined lacked a joker, doubtless due to a packaging

error.

From time to time, cards change in size and shape. Some years ago round cards were a fad in playing cards, though they were not new, since very old round cards are preserved in museums. There have also been black-background cards and other novelties, but for the most part the conventional rectangular shape is the most popular, and conventional styles for printings and markings persist.

The $2\frac{1}{4} \times 3\frac{1}{2}$ -inch rectangular cards are sometimes called "bridge" cards, possibly because it is easier to hold thirteen cards of this size in the hand. (Wider cards make a bulky hand that is difficult to hold and manipulate in bridge, and when the size is combined with large indices, as is the case with the *Jumbo* cards tested, holding a bridge hand properly becomes almost impracticable, at least for a woman.)

Of the card decks tested, *Bicycle*, *Caravan*, *Crusader*, and *Jumbo* were of the larger size. All the others were of the smaller, $2\frac{1}{4} \times 3\frac{1}{2}$ -inch type.

Twelve decks of cards were included in the following test. The cards were purchased in a large midwestern city, and shopping was done at large department stores and 5-and-10-cent stores. Practically all stores were found to carry the same general groups of brands. Some decks of cards of different brands made by the same companies (or subsidiaries) were found to have been printed from identical plates. Thus the face cards of the *Barclay*, *Centaur*, and *Duratone* were from identical plates; likewise the *Bicycle* and *Caravan*, the *Guild* and *Imperial*, *Congress* and *Gladstone*. In the case of the last two named, the faces

on the face cards were color-printed on the *Congress* cards but not on the *Gladstone*.

Plastic cards were not included in this test, since they were not found available at the time samples for this use were purchased. In previous tests, plastic cards, though suffering under the disadvantage of being very expensive and flammable, proved to have outstanding resistance to wear. (Some difficulties have been noted with the *Kem* brand in fading of the parts printed in red.)

Greatest weight in the rating of the cards was given to two factors, the cards' resistance to wear, and their ability to withstand bending with minimum damage. Wear was simulated by placing four of the cards in a cardboard box, $5\frac{1}{2} \times 7\frac{1}{2} \times 37$ inches, and allowing them to fall 50 times while shaking the box, and 50 times without shaking. The cards were then examined for traces of damage, and ranked on the basis first of the fewer separations (loss of adhesion between card layers at a bent corner), and second on the extent of marring. In addition to these tests, the cards were also tested for resistance to soiling, resistance to tear, bursting strength, and resistance to washing. (The last factor was not given weight in the listings because exposure to moisture is not normal in the ordinary use of cards, except, perhaps, in tropical climates. The data are included in the listings, however, for the benefit of those who might find it useful.)

Kinesthetic properties, such as riffling, shuffling, and dealing, were judged, care being taken to reproduce conditions of test for each deck tested.

Cards were of the narrow or

bridge type except as noted in the listings. Ratings are cr45.

A. Recommended

Bicycle Rider Back (U. S. Playing Card Co., Cincinnati) 45c. Linen-finished, wide-type cards with plain edges, packed in a light cardboard box. Resistance to wear and to soiling, good; to bending, fair. Tear resistance and bursting strength, good. Cards shuffled readily. Ease of dealing, judged good. Cards were warped slightly after washing. Judged to be the best deck tested. 2

* * *

The following brand was not quite as desirable as the *Bicycle* cards.

Congress (U. S. Playing Card Co.) Two packs, \$1.50 (75c each). Luster-finished cards with silvered edges, packed in a heavy telescoping box. Resistance to wear, soiling, and bending, fair. Tear resistance, good; bursting strength, fair. Cards shuffled easily. Ease of dealing, fair. Cards were unaffected by washing. 3

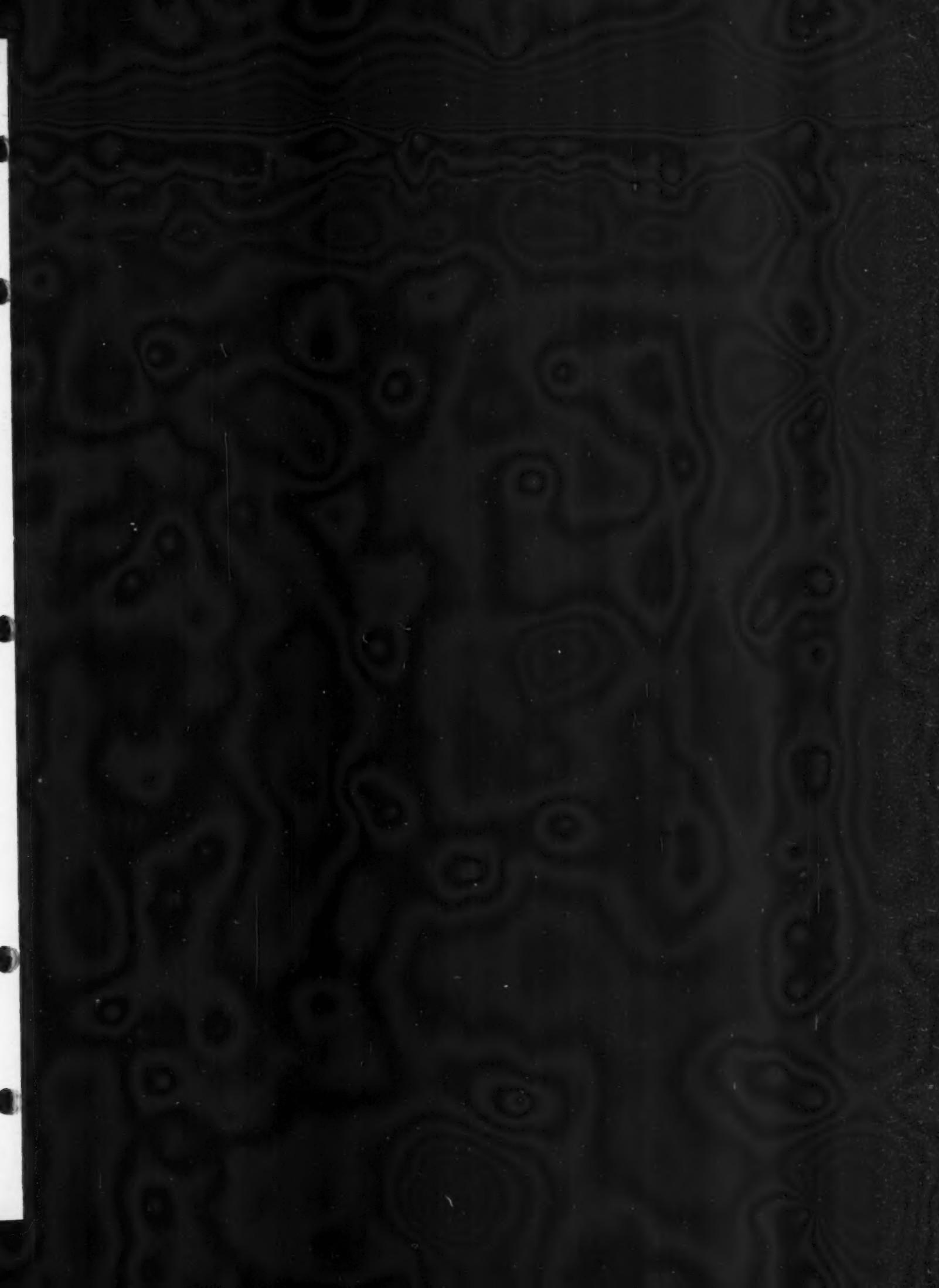
B. Intermediate

Barclay (Arrco Playing Card Co., 310 S. Racine, Chicago 7) 30c. Satin-finished, plain edges, packed in light box. Resistance to wear and soiling, fair; to bending, poor. Tear resistance and bursting strength, poor. Cards shuffled easily. Ease of dealing, fair. Cards were very slightly warped after washing. 1

Caravan (U. S. Playing Card Co.) 30c. Linen-finished, wide-type cards with plain edges, packed in a light box. Resistance to wear, fair; to soiling, good; to bending, poor. Tear resistance, poor; bursting strength, fair. Cards shuffled readily. Ease of dealing, fair. Finish was marred by washing. 1

Centaur (Arrco Playing Card Co.) 30c. Satin-finished cards with plain edges, packed in a light box. Resistance to wear, good; to soiling, fair; to bending, poor. Tear resistance and bursting strength, poor. Cards shuffled easily. Ease of dealing, fair. Cards were slightly warped after washing test. 1

Gladstone (Russell Playing Card Co., 200 Fifth Ave., New York 10) 35c. Linen-finished cards with plain edges, packed in heavy box. Resistance to wear, fair; to soiling, good; to bending, poor. Tear resistance, poor;





bursting strength, fair. Cards shuffled easily. Ease of dealing, fair. Cards lost luster slightly in washing. **2**

Imperial (Western Playing Card Co., Racine, Wis.) 35c. Faintly "linen-finished" cards with plain edges, packed in a heavy box. Resistance to wear, poor; to soiling, fair; to bending, good. Tear resistance and bursting strength, fair. Cards shuffled easily. Ease of dealing, fair. Finish marred by washing. **2**

Duratone Plastic Coated (Arco Playing Card Co.) 75c. Luster-finished cards with gilt edges, packed in a telescoping box. Resistance to wear and soiling, good; to bending, poor. Tear resistance, good; bursting strength, poor. Cards shuffled easily. Ease of dealing, fair. Cards were unaffected by washing. **3**

Guild (Western Playing Card Co.) Two packs for \$1.25 (63c each). Satin-finished cards with gilt edges, packed in a heavy box. Resistance to wear, soiling, and bending, fair. Tear resistance and bursting strength, fair. Cards shuffled easily. Ease of dealing, fair. Finish damaged and cards warped after washing test. **3**

Jumbo (U. S. Playing Card Co.) 75c. Linen-finished, wide-type cards with plain edges, packed in a heavy telescoping box. A novelty deck, with indices printed very large. The size of the indices and the width of the cards were such as to make it difficult to hold a bridge hand with all indices visible. Resistance to wear and soiling, good; to bending, poor. Tear resistance, fair; bursting strength, good. Cards shuffled read-

ily. Ease of dealing, fair. Finish of cards was marred by washing. **3**

C. Not Recommended

Crusader (E. E. Fairchild Corp., Rochester, N.Y.) 29c. Satin-finished, wide-type cards with plain edges, packed in a light box. Resistance to wear, soiling, and bending, poor. Tear resistance, poor; bursting strength, fair. Cards shuffled readily. Ease of dealing, poor. Cards were slightly dished after washing test. **1**

Haddon Hall (E. E. Fairchild Corp.) Two packs for 69c (35c each). Satin-finished cards with plain edges, packed in a heavy box. Resistance to wear, soiling, and bending, poor. Tear resistance, poor; bursting strength, fair. Cards shuffled easily. Ease of dealing, fair. Luster was removed by washing. **2**

Three Chemical Specialty Products

Acid-O, a repair liquid for leaky cans and buckets; **Veeco** and **Waxoff**, floor wax removers

Acid-O is a thick, black, tarry liquid that sells at about 80c for a pint. It is intended to be used for repairing garbage cans, buckets, downspouts, and other metal or wood articles which have sprung a leak. The label of *Acid-O* asserts that the product makes most anything leakproof, waterproof, rustproof. Chemical analysis shows the material to be a coal-tar-pitch emulsion containing a mineral filler in the form of

silica. A trial of this product indicated that it would be satisfactory for leaks caused by small cracks but that it was quite unsuccessful in sealing the bottom of a leaky sprinkling can and experimental openings in other containers (although these were of such type and size as should have been easily plugged with the product if it lived up to its maker's claims). When tried without the use of muslin supporting layer (recommended to

be placed over larger holes and cracks) before applying *Acid-O*, the product failed to seal up a leak around the bottom rim of a galvanized sprinkling pot even when as many as three coats had been applied. It is doubtful whether the performance of *Acid-O* is good enough to warrant its use for plugging leaks in buckets or sprinkling pots unless the use were such that there would be no harm in having a small leak continue after the repair.

Waxoff is a product now being sold for the removal of wax, floor oil, polish, etc. It is alleged to be the "modern way to remove wax, floor oil, polish, etc." It is to be used by dissolving the contents of a 3-oz. package (priced at 10c) in a gallon of water, and this is supposed to be sufficient to apply to approximately 200 square feet of surface. Analysis shows this product to be the household specialty manufacturers' old and reliable friend trisodium phosphate (see CR's previous reports in BULLETIN of June 1944), dyed with a trace of ultramarine blue. *Waxoff*, upon trial, was found to have only limited value as a floor wax remover. It cer-

tainly did not exhibit the speedy action claimed on the label. Likewise, it did not have the effect in polishing wood that was claimed. The directions seem misleading in intimating that if the varnish is removed, it is not the fault of *Waxoff*, but "indicates that the surface needs revarnishing." The maker of *Waxoff* asserts that *Waxoff* will not harm varnish, but actually varnish, like paint, is highly susceptible to a solution of strong alkali such as trisodium phosphate, and no strongly alkaline material can, of course, be safely applied to a varnished floor for the purpose of removing old wax, floor oil, etc., unless one is prepared to have the

varnish, or some of it, removed along with the oil or wax.

Veeco Floor Wax Remover consists of beads or pellets which chemical analysis showed to be chiefly trisodium phosphate with some sodium carbonate and a small amount of sodium persulfate (a bleach and oxidizer used apparently to prevent darkening of wood surfaces treated). It is used by dissolving in hot water and rubbing until wax is removed, followed by a rinse of clear water. This product is similar to *Waxoff* and carried the same warning regarding use on varnished surfaces, in almost the same words. Comments under *Waxoff* regarding this property also apply to *Veeco*.

★ ★ ★ Dry-Powder

Fire Extinguishers ★ ★ ★

TEN or twenty years ago there were large sales through stores and canvassers of "dry-powder fire extinguishers," which consisted of a sheet-metal tube, sometimes even one of paperboard, containing some inert material or mixture in dry powder form. These extinguishers have been very convincingly "demonstrated" by door-to-door salesmen and others. The extinguishing agent that was usually used in this type of appliance was bicarbonate of soda, which can be successful on certain types of fires, but usually would not be except under the very special conditions set up by a clever demonstrator in showing off the extinguisher. In actual practice, as the Indiana Better Business Bureau advises in a bulletin, fires seldom arrange themselves so con-

veniently as the ones set up by the demonstrators, and the ordinary individual will have the greatest difficulty in making any effective use of a dry-powder tube on a fire in the open, both because of the small amount of the powder available in the extinguisher, and because it is almost impossible to apply the powder effectively to an actual fire at a time of emergency and excitement. Another fault of this type is that the powder often cakes through absorption of moisture from the air and then is incapable of being utilized under even the most favorable circumstances.

Dry-powder extinguishers are being advertised again, sometimes by reputable department and home furnishing stores, and, although they sell for \$2.50 to \$3.50 each or even

more, are of extremely limited value, and their use is not recommended. They will often increase rather than diminish the hazard in the home because having them about engenders a false sense of security.

C. Not Recommended

Whippet (Halco Chemical Corp., 551 Fifth Ave., New York 17) \$2.50. A dry-powder extinguisher recently purchased and tested, was sold under the claim "an instant fire extinguisher successful against all types of fires including household fires, factory fires, gasoline fires, acetylene gas fires, grease and oil fires, chimney and brush fires, magnesium and electric fires." The contents of this extinguisher consisted primarily of bicarbonate of soda (nearly 80%); calcium carbonate (whiting or ground chalk), 8%; the remainder being sand (silica) and iron oxide. It is hard to see how the promoters of a product of this type could possibly account for their claim to "quell fires with amazing speed and certainty."

Ratings of Motion Pictures

THIS section aims to give critical consumers a digest of opinion from a wide range of motion picture reviews, including the motion picture trade press, leading newspapers and magazines—some 19 different periodicals in all. The motion picture ratings which follow thus do not represent the judgment of a single person, but are based on an analysis of critics' reviews.

The sources of the reviews are:

Box Office, Chicago Daily Tribune, *The Christian Century*, *Cue*, *Daily News* (N.Y.), *The Exhibitor*, *Harrison's Reports*, *Mademoiselle*, *Motion Picture Herald*, *National Legion of Decency List*, *Newsweek*, *New York Herald Tribune*, *New York Times*, *Parents' Magazine*, *Release of the D.A.R. Preview Committee*, *Successful Farming*, *Time*, *Variety* (weekly), and *Unbiased Opinions of Current Motion Pictures*, which includes reviews by the General Federation of Women's Clubs, the American Legion Auxiliary, National Film Music Council, and others.

The figures preceding the title of the picture indicate the number of critics who have been judged to rate the film A (recommended), B (intermediate), and C (not recommended).

Audience suitability is indicated by "A" for adults, "Y" for young people (14-18), and "C" for children, at the end of each line.

Descriptive abbreviations are as follows:

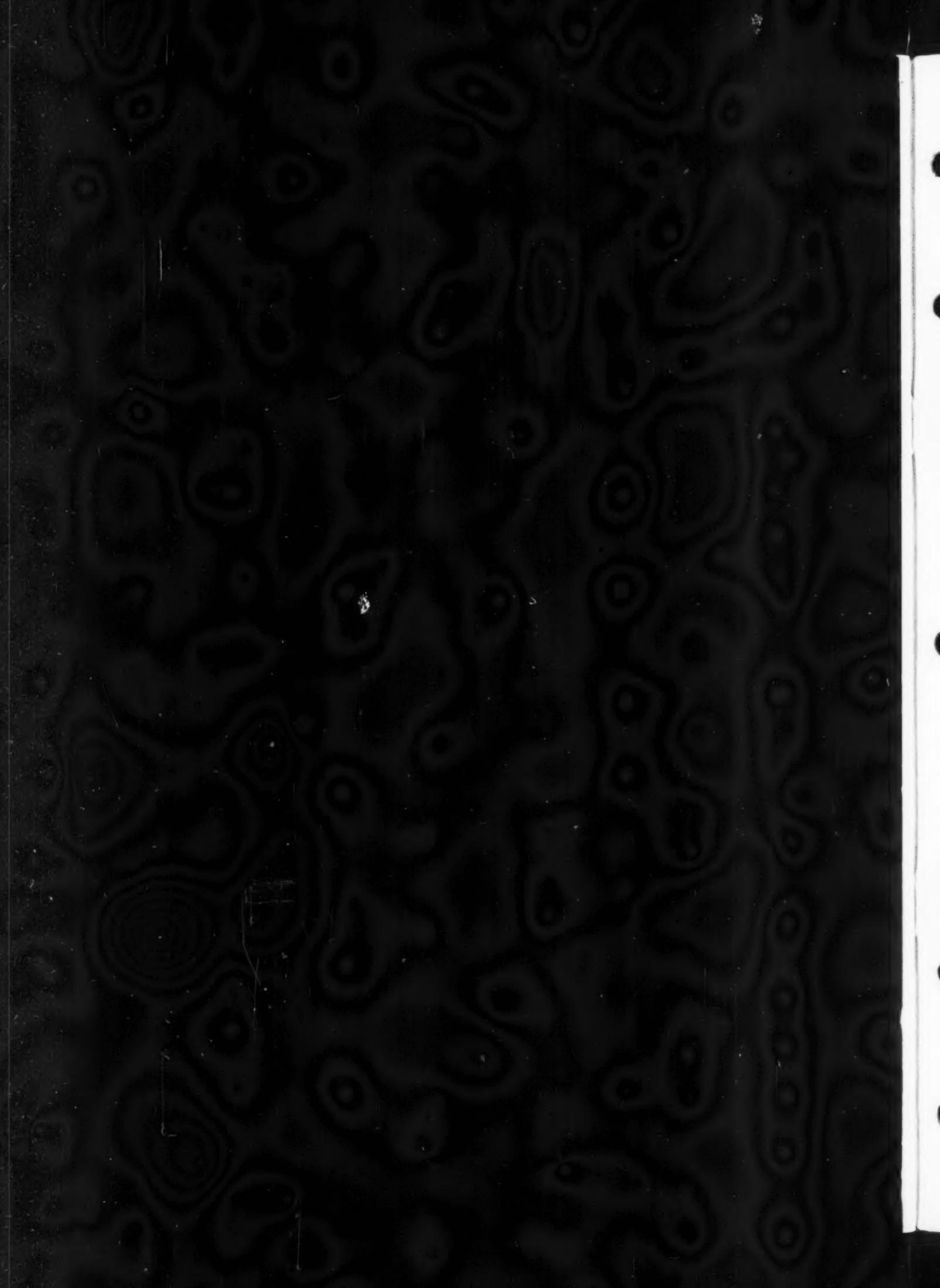
adv—adventure	hist—founded on historical incident
bio—biography	mel—melodrama
c—in color (Technicolor, Cine-color, or Magnacolor)	mus—musical
car—cartoon	mys—mystery
com—comedy	nov—dramatization of a novel
cri—crime and capture of criminals	rom—romance
doc—documentary	soc—social-problem drama
dr—drama	trap—travelogue
fan—fantasy	war—dealing with the lives of people in wartime
wes—western	

A	B	C	
—	9	2	Abilene Town.....mus-wes AY
1	9	8	Adventure.....mel A
—	1	2	Adventure for Two.....dr AYC
—	1	10	Allotment Wives.....war-mel A
1	4	—	Along the Navajo Trail.....mus-wes AYC
—	1	3	Ambush Trail.....wes AYC
—	1	5	Angel Comes to Brooklyn, An.....mus-com A
3	3	1	Appointment in Tokyo.....war-doc AY
1	7	1	Bad Bascom.....mel AYC
—	4	1	Badman's Territory.....wes AYC
—	10	4	Bandit of Sherwood Forest.....hist-dr-c YC
—	3	1	Bandits of the Badlands.....wes A
1	5	1	Battle for Music.....mus-doc AYC
7	7	7	Because of Him.....mus-dr A
4	2	2	Bedlam.....dr A
—	4	5	Behind Green Lights.....cri-mel A
3	2	2	Behind the Mask.....cri-mel A
7	9	2	Bells of St. Mary's, The.....dr AYC
—	4	9	Black Market Babies.....mel A
—	1	4	Blazing the Western Trail.....mus-wes AYC
—	4	6	Blonde Alibi.....cri-com A
—	1	3	Blondie's Lucky Day.....com AYC
1	7	1	Blue Dahlia, The.....cri-mel A
—	2	2	Border Bandits.....wes AYC
—	10	2	Breakfast in Hollywood.....mus-com A
—	3	5	Bride Wore Boots, The.....com A
4	2	—	Burma Victory.....war-doc A
—	3	—	California Gold Rush.....wes AYC
—	2	6	Captain Tugboat Annie.....mel AYC
—	1	3	Caravan Trail, The.....mus-wes-c AYC
—	—	5	Castle of Crimes.....mys-mel A
—	3	2	Cat Creeps, The.....cri-mel A
—	1	5	Catman of Paris, The.....cri-mel A

A	B	C	
—	2	8	Cinderella Jones.....mus-com A
—	1	7	Close Call for Boston Blackie.....cri-mys A
—	2	6	Club Havana.....mus-mel A
—	2	1	Code of the Lawless.....wes AYC
1	10	5	Col. Effingham's Raid.....dr A
1	5	7	Confidential Agent.....war-mel A
—	13	2	Cornered.....war-mel A
—	6	3	Crazy Knights.....cri-mel AYC
—	4	5	Crime Doctor's Warning, The.....mys-dr A
—	—	—	Crimson Canary, The.....mus-dr A
—	5	6	Dakota.....mel A
—	6	5	Daltons Ride Again, The.....wes AYC
—	4	8	Danger Signal.....mel A
—	5	3	Danny Boy.....dr AYC
—	2	2	Dark Alibi.....mys-mel AYC
—	5	1	Dark Corner, The.....cri-mel A
—	3	5	Dark Is the Night.....war-dr A
—	2	1	Days and Nights.....war-nov A
—	9	6	Deadline at Dawn.....cri-mel A
—	4	3	Detour.....cri-mel A
—	3	2	Devil Bat's Daughter.....mys-mel A
—	7	4	Devotion.....biog-dr AYC
—	5	9	Diary of a Chambermaid.....dr A
—	8	3	Dick Tracy.....mel A
—	4	3	Ding Dong Williams.....mus-com AYC
—	4	—	Do You Love Me?.....mus-com-c AY
—	6	7	Doll Face.....mus-com A
—	7	7	Don't Fence Me In.....mus-wes A
2	5	8	Dragonwyck.....nor A
—	1	3	Drifting Along.....mus-wes AYC
1	5	1	Easy to Wed.....mus-com-c A
—	8	5	Enchanted Forest, The.....fan-c AYC
—	1	6	Face of Marble.....cri-mel A
—	4	3	Falcon's Alibi, The.....mus-cri-mel A
—	1	6	Fallen Angel.....mys-mel A
—	3	3	Fear.....cri-mel A
—	3	1	Fedora.....dr A
—	1	7	Flying Serpent, The.....mel A
—	3	3	Four Hearts.....mus-rom A
2	8	2	From This Day Forward.....war-dr A
—	1	2	Frontier Feud.....wes AYC
—	8	4	Frontier Gal.....mus-wes-c A
—	3	3	Frontier Gunlaw.....wes AYC
—	5	7	Game of Death, A.....cri-mel A
—	4	2	Gay Blades.....com AYC
—	1	3	Gay Intruders, The.....war-nov AYC
—	2	7	Gentleman Misbehaves, The.....mus-com A
—	4	4	Gentlemen with Guns.....wes AYC
—	6	6	Getting Gertie's Garter.....com A
—	6	8	Gilda.....mus-cri-mel A
—	1	7	Girl on the Spot.....mus-dr AY
—	1	5	Girls of the Big House.....cri-mel A
—	3	9	Green Years, The.....nov AY
—	1	3	Gun Town.....mus-wes A
—	1	7	Guy Could Change, A.....dr A
1	13	3	Harvey Girls, The.....wes-mus-com-c A
1	3	1	Heartbeat.....com A
2	2	2	Her Kind of Man.....cri-mel A
—	1	4	Hit the Hay.....com AYC
—	3	11	Hold That Blonde.....mus-wes-c AYC
—	1	3	Home on the Range.....mus-dr A
—	6	4	Hoodlum Saint, The.....war-mel AYC
—	2	4	Hot Cargo.....war-mel A
—	2	3	Hotel Reserve.....cri-mel A
—	2	9	House of Dracula.....cri-mel A
—	2	5	House of Horrors.....cri-mel A
—	2	3	How Do You Do?.....mus-cri-com A
—	7	7	I Ring Doorbells.....cri-mel A
—	6	6	Idea Girl.....mus-com A
—	3	1	In Old Sacramento.....mus-wes AYC
—	1	6	Isle of the Dead.....mys-mel A
—	6	3	It Happened at the Inn.....mel A

A	B	C		A	B	C	
—	3	4	Joe Palooka, Champ.....	—	2	4	Shadow Returns, The.....
—	6	4	Johnny Comes Flying Home.....	—	5	6	She Went to the Races.....
1	5	2	Johnny in the Clouds.....	—	2	5	She-Wolf of London.....
3	3	2	Journey Together.....	—	9	4	She Wouldn't Say Yes.....
—	5	4	Junior Prom.....	—	4	5	Shock.....
—	6	2	Just Before the Dawn.....	—	5	2	Six P.M.....
1	11	1	Kid from Brooklyn, The.....	—	1	4	Six-Gun Man.....
1	14	3	Kiss and Tell.....	—	3	5	Smooth as Silk.....
2	9	5	Kitty.....	—	11	—	Snafu.....
4	13	1	Last Chance, The.....	—	7	2	So Goes My Love.....
—	4	2	Lawless Empire.....	—	4	2	Song of Arizona.....
3	5	7	Leave Her to Heaven.....	—	—	3	Song of Mexico.....
—	6	1	Letter for Evie, A.....	—	2	3	Song of Old Wyoming.....
—	4	5	Life with Blondie.....	—	—	1	Song of the Prairie.....
—	3	2	Lightning Raiders.....	—	11	4	South of the Rio Grande.....
—	6	3	Little Giant.....	—	9	6	Spanish Main, The.....
—	3	3	Live Wires.....	—	—	5	Spellbound.....
—	1	4	Lost Trail, The.....	—	3	5	Spider, The.....
—	2	4	Love on the Dole.....	—	1	9	Spider Woman Strikes Back, The.....
—	6	3	Madonna of the Seven Moons.....	—	4	8	Spiral Staircase, The.....
—	6	1	Madonna's Secret, The.....	—	1	13	Stagecoach Outlaws.....
4	5	—	Make Mine Music.....	—	2	8	Stork Club, The.....
—	3	10	Man Alive.....	—	4	—	Strange Confession.....
—	7	6	Man in Grey, The.....	—	4	4	Strange Conquest.....
2	7	1	Marie-Louise.....	—	2	3	Strange Holiday.....
—	2	5	Mask of Dijon, The.....	—	3	2	Strange Impersonation.....
—	8	10	Masquerade in Mexico.....	—	6	1	Strange Love of Martha Ivers, The.....
—	6	3	Meet Me on Broadway.....	—	5	3	Strange Mr. Gregory, The.....
—	4	7	Mexicana.....	—	—	2	Strange Voyage.....
1	7	4	Miss Susie Slagle's.....	—	5	5	Strangler of the Swamp.....
—	8	1	Murder in the Music Hall.....	—	1	4	Sunbonnet Sue.....
—	3	3	Murder Is My Business.....	—	5	1	Sunset in El Dorado.....
—	11	3	My Name in Julia Ross.....	—	—	1	Suspense.....
2	6	6	My Reputation.....	—	5	5	Swing Parade of 1946.....
—	4	1	Mysterious Intruder.....	—	—	3	Symphonie d'Amour.....
—	3	3	Navajo Kid.....	—	3	3	Talk About a Lady.....
—	3	—	Navajo Trail, The.....	—	11	—	Tangier.....
—	3	4	Night Editor.....	—	6	3	Tars and Spars.....
1	6	—	Night in Casablanca, A.....	—	2	8	Tarzan and the Leopard Woman.....
1	3	3	Night in Paradise.....	—	7	4	Ten Cents a Dance.....
—	2	5	Notorious Lone Wolf, The.....	—	3	2	Terror by Night.....
—	4	1	Once There Was a Girl.....	—	3	5	Texas Panhandle.....
—	5	4	One Way to Love.....	—	6	9	They Made Me a Killer.....
—	9	2	Open City.....	—	1	7	They Were Expendable.....
—	7	—	Our Hearts Were Growing Up.....	—	9	6	This Love of Ours.....
—	4	4	Out of the Depths.....	—	9	4	Three Strangers.....
—	1	5	Outlaw, The.....	—	1	2	Throw a Saddle on a Star.....
—	—	7	Outlaws of the Rockies.....	—	2	2	Thunder Town.....
—	4	—	Partners in Time.....	—	5	5	Tiger Woman, The.....
—	4	8	People Are Funny.....	—	4	4	To Each His Own.....
—	3	3	Perilous Holiday.....	—	4	5	Tokyo Rose.....
—	3	7	Pillow of Death.....	—	8	5	Tomorrow is Forever.....
—	5	—	Portrait of a Woman.....	—	2	1	Too Young to Know.....
1	5	3	Portrait of Maria.....	—	2	1	Trail of Kit Carson.....
—	2	5	Postman Always Rings Twice, The.....	—	3	2	Trail to Vengeance.....
—	1	2	Prairie Rustlers.....	—	1	5	Trouble Chasers.....
—	2	7	Prison Ship.....	—	4	1	Truth About Murder.....
—	6	5	Pursuit to Algiers.....	—	7	3	Two Sisters from Boston.....
—	6	—	Red Dragon, The.....	—	1	13	Up Goes Maisie.....
—	4	4	Riders of the Dawn.....	—	1	9	Vacation from Marriage.....
—	2	6	Riverboat Rhythm.....	—	3	3	Virginian, The.....
2	13	2	Road to Utopia.....	—	—	5	Voice of the Whistler, The.....
—	3	2	Roaring Rangers.....	—	4	—	Wagon Wheels Westward.....
—	3	2	Romance of the West.....	—	7	3	Walk in the Sun, A.....
1	3	1	Rough Riders of Cheyenne.....	—	3	3	Waltz Time.....
—	10	8	Sailor Takes a Wife, The.....	—	5	4	Wanderer of the Wasteland.....
—	11	2	San Antonio.....	—	1	5	Well-Groomed Bride, The.....
4	9	4	Saratoga Trunk.....	—	12	3	What Next, Corporal Hargrove.....
—	6	9	Scarlet Street.....	—	4	4	Whirlwind of Paris.....
—	6	3	Scotland Yard Investigator.....	—	3	11	Whistle Stop.....
—	2	9	Senorita from the West.....	—	6	3	Wife of Monte Cristo, The.....
—	—	5	Sensation Hunters.....	—	—	4	Without Dowry.....
—	7	7	Sentimental Journey.....	—	3	6	Woman Who Came Back, The.....
5	11	—	Seventh Veil, The.....	—	7	2	Yank in London, A.....
—	4	3	Shadow of Terror.....	—	7	9	Yolanda and the Thief.....
—	—	—	Shadow of Terror.....	—	7	4	Young Widow.....
—	2	10	—	—	3	3	Youth Aflame.....
—	—	—	—	2	10	2	Ziegfeld Follies.....





The Consumers' Observation Post

[Continued from page 4]

cut, may be placed, cut surface down, in a soup plate of ale or they may be cut in two and slices taken off; then the two pieces may be fitted back together again to prevent rapid drying out, according to the 1895 expert.

* * *

WATCH OUT FOR INFERIOR RAYON RIBBONS now on the market, warns the Federal Trade Commission. Newcomers in the ribbon business have taken bolts of rejected rayon cloth and cut it into strips with heated knives. The resulting product lacks the customary woven edge and does not have the wearing quality of woven edge ribbons.

* * *

OUR MODERN DIET is very sensitive to sudden and unexpected deficiencies in the food supply or to overrefinement in important foods such as flour and fats. Just why this should be so is evident when we consider that about one-half of the average man's diet consists of foodstuffs that are completely lacking in vitamins. The normal complement of vitamins, proteins, and other vital food essentials which formerly were distributed throughout the entire food intake must, therefore, now be supplied within only one-half of the food supply. The result is that deficiencies due to exceptional conditions of food preparation (such as holding cooked foods too long on the steam table) or shortages of customary foods such as fresh meat or vegetables very often result in digestive troubles or other bodily defects. Dr. Louis Winfield Kohn mentions this point in his book, *Your Digestive System*, and remarks further that proteins, the characteristic food element of meat, eggs, poultry, and fish, are essential not only for growth and repair of tissues, but for the manufacture of the hormones, secretions, and ferments whose maintenance with the correct characteristics and in adequate amounts is as essential to healthful living as the proper intake of vitamins and minerals. No doubt, it is the attempt to correct these very real but little appreciated differences and losses of food values that has led many people into the habit of taking supplementary vitamins and minerals in the hope of correcting ill-health caused by an unsuitable and deficient dietary.

"An affirmation of what a lot of hearty eaters and common-sense men and women have believed and practiced thru centuries . . .

"Meat three times a day? Well, why not? Here, with a rich marshaling of material, is the gist of the case for the world's meat eaters . . . Here's to Schlink and Phillips, the bringers of light, and to a thick, juicy steak under every broiler."

—Stanley Walker
N.Y. Herald Tribune

"The old menus they have resurrected are something to make a mouth water and to sigh for a return of the days when one might follow a venison steak with a dozen stewed oysters, in the best hotel in town, for a total cost of 75 cents."

—N.Y. Sun

"There is a book publisher in New York named Richard R. Smith who has sent me, an involuntary vegetarian, a tome with a magnificent full-color picture of a beefsteak on the front entitled 'Meat Three Times a Day'.

Mr. Smith, are you crazy? Why didn't you send me a piece of meat?

This is a fine time to be torturing people with books about what elegant stuff meat is, how it keeps you from catching colds, and makes your wife work harder. In my house, the only meat is phony, made of soybeans."

—Frederick C. Othman
N.Y. World Telegram

Meat Three Times A Day

by F. J. Schlink and M. C. Phillips

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**Special Edition
for
CR Subscribers
\$1.50!
Please use the
convenient
order blank on
next page.**

NEW PRODUCTS: Scoop, advertised as "new amazing Soapless Crystals--works with a scientific 3 way action" (wetting, cleansing, water-softening). Is sold at 19 cents in a one-pound cardboard container in the form of white crystals. An analysis of Scoop indicated that it was a mixture of carbonates and bi-carbonates of soda, 18% tetrasodium pyrophosphate (tspp.), 5% sodium sulfate, 4-1/2% sulfonated organic detergent. The pH of the product in solution (which measures its alkalinity) is about 10.5, which is satisfactory, as it corresponds about to the alkalinity of a soap which would be used for housework, dishwashing, etc. The value of the pyrophosphate is as a "sequestering agent" for the calcium compounds when the cleaner is used in a hard water; such an agent acts to decrease the tendency to produce a gray deposit or scum in washing. This product would appear to have some merit since it contains substances with good detergent properties and at the same time does not have the high alkalinity which would make a cleaning agent hard on the hands. Products of this general composition and type have been in wide sale of late. They have been introduced because of the shortage of synthetic detergents (soap substitutes of the lathering type) which have been in very short supply during the war, because of heavy government requirements, and will continue to be scarce for some months to come.

Plastic Patch is a new product, distributed by the makers of Kem-Tone, for filling cracks and patches in plaster, wood, composition board, brick, etc. It is claimed to be superior to ordinary patching plaster in several respects. Chemical analysis showed the product to be a mixture of calcium sulphate (probably gypsum), calcium carbonate, and a small amount of starch. It was found to work well in patching small cracks without undercutting, which would make it very desirable from the householder's point of view as the preparation of cracks for patching in the usual way is a messy and time-consuming task. When set, this product was found to be less chalky than ordinary patching plaster or "spackling compound" such as the well-known and widely-sold Rutland brand; this is a desirable feature. (Rutland Spackling Compound or patching cement was found on analysis to be plaster of Paris 60%, whiting 35%, glue [to retard setting] 5%.) Plastic Patch, which sells in 1-lb. boxes for 23 cents, is about twice as expensive as ordinary patching plaster, priced at 2-1/2 lb. for 25 cents. However, the saving in time and labor by use of Plastic Patch would make it worth the additional price, probably, to most homeowners.

Consumers' Research, Inc. Washington, N. J.

Please enter my order as checked. It is understood that my handling of any CR material which is marked "The analyses of commodities, products, or merchandise appearing in this issue of the Consumers' Research Bulletin are for the sole information of Consumers' Research subscribers" will be in accordance with that direction.

NAME _____
(PLEASE SIGN IN LONGHAND)

STREET _____

CITY & ZONE _____ STATE _____

BUSINESS OR PROFESSION _____ CR-6-46

Please check one:

I enclose \$1.50 for a copy of the CR edition of "Meat Three Times A Day." Since I am a subscriber to Consumers' Research Bulletin (12 issues), I am entitled to the special rate.

I enclose \$4.50 (Canada & foreign, \$5.00) for one year's subscription to Consumers' Research Bulletin monthly (12 issues) AND a copy of the CR edition of "Meat Three Times A Day."

I enclose \$3 (Canada & foreign, \$3.50) for one year's subscription to Consumers' Research Bulletin monthly (12 issues).

PHONOGRAPH RECORDS

By Walter F. Grueninger

Please Note: Prices quoted do not include taxes. In the ratings AA indicates highly recommended; A, recommended; B, intermediate; C, not recommended.

ORCHESTRA

Dohnanyi: *Suite in F Sharp Major*. Philharmonic Orchestra of Los Angeles under Wallenstein. 6 sides, Decca Set 433. \$3.50. Interesting work.

Interpretation AA
Fidelity of Recording A

D'Indy: *Istar* Symphonic Variations (3 sides) & *Fervaal*—Introduction to Act 1 (1 side). San Francisco Symphony Orchestra under Monteux. Victor Set SP16. \$2.25. Infrequently played in concert halls, though likely to interest the connoisseur.

Interpretation AA
Fidelity of Recording A

Strauss Polkas. Boston Pops Orchestra under Fiedler. 6 sides, Victor Set 1049. \$3.00. Gay dances by the Strauss. Since most of the music is played loudly, Symphony Hall echo frequently clouds detail.

Interpretation AA
Fidelity of Recording B

Your Favorite Strauss Waltzes. Orchestra under Freed. 8 sides, Capitol Set BD22. \$2.50. Abbreviated versions of "Emperor," "Blue Danube," etc., in dance tempo by a small orchestra.

Interpretation AA
Fidelity of Recording AA

Music of Tchaikovsky. Robin Hood Dell Orchestra under Kostelanetz. 6 sides, Columbia Set 601. \$3.85. Favorite short numbers played often at Pop concerts. Included are "None but the Lonely Heart," "The Sleeping Beauty Waltz," "Andante Cantabile," "Melodie," etc.

Interpretation A
Fidelity of Recording A

CONCERTO

Brahms: *Violin Concerto*. Szigeti with the Philadelphia Orchestra under Ormandy (9 sides) & *Sonata No. 3—Adagio* only. Szigeti (violin) Hambro (piano). (1 side). Columbia Set 603. \$5.85. One of the greatest violin concertos, eloquently performed. Wide range recording, sometimes wiry. Far too often, however, the solo part does not stand out clearly. Szigeti's earlier Columbia Set 117, which I shall retain, offers the advantage of hearing every note Szigeti plays despite inferior recording and orchestral support. The foremost competitor, Heifetz's Victor Set 581, offers more sheen with good recording. The choice is likely to depend on your preference of soloists and interpretation. I prefer Szigeti.

Interpretation AA
Fidelity of Recording B

INSTRUMENTAL

Bach: *Organ Music*. E. Power Biggs (organ). 8 sides, Victor Set 1048. \$4.85. Five of Bach's most popular organ compositions played with insight on the organ of the Memorial Church of Harvard University. Included are the "Little G Minor Fugue," "Sheep May Safely Graze," "Passacaglia and Fugue in C Minor" (4 sides), etc.

Interpretation AA
Fidelity of Recording AA

Bach: *Sonata in E* (No. 3). Landowska (harpsichord), Menuhin (violin). 6 sides, Victor Set 1035. \$3.85. Bach's most popular sonata for violin and clavier. Rather ponderous performance splendidly recorded.

Interpretation A
Fidelity of Recording AA

Beethoven: *Sonata in F Minor* ("Appassionata") (5 sides) & *Sonata in E Flat—Minuetto* only (1 side). Artur Rubinstein (piano). Victor Set DV 3. \$6.85. Plastic edition of the uneven performance released previously on shellac, Victor Set 1018 (\$3.85). (See CR Bul., Jan. '46). Dealers tell me some purchasers of plastic disks complain of their short life. After questioning, it is generally established that the pick-up used is

neither light nor compliant as last October I warned was necessary.

Interpretation B
Fidelity of Recording AA

Chopin: *Piano Music*. Horowitz (piano). 6 sides, Victor Set 1034. \$3.85. Unconventional but impressive performance of the "Andante spianato and Grande Polonaise," "Waltz in A Minor," and "Polonaise in A Flat" (THE Polonaise), the last available also as a single disk.

Interpretation A
Fidelity of Recording AA

Prokofieff: *Sonata No. 7*. Horowitz (piano). 4 sides, Victor Set 1042. \$2.85. The composition, completed in 1942, will appeal to few outside the inner circle.

Interpretation AA
Fidelity of Recording AA

A Two Piano Recital. Luboschutz and Nemenoff. 8 sides, Victor Set 1047. \$4.85. "Rondo in C" by Chopin, "Allegro Brilliant in A" by Mendelssohn, "Andante and Variations" by Schumann—thin fare musically, all played expertly.

Interpretation AA
Fidelity of Recording A

VOCAL

Bach: *Cantata No. 78*. Bach Choir of Bethlehem under Ifor Jones. 8 sides, Victor Set 1045. \$4.85. Welcome addition to the catalogue despite minor deficiencies of performance.

Interpretation A
Fidelity of Recording AA

Bizet: *Carmen*—Excerpts. Stevens, Conner, Jobin, Weede (singers) under Sebastian. 10 sides, Columbia Set 607. \$5.85. Act I Prelude, most of the popular arias, and final duet presented by an average 1946 Metropolitan cast, which is to say better performances of nearly all sides are already catalogued. The orchestra gets off to an unimaginative start and is recorded without sufficient body but featured Rise Stevens sets the pace on side 2. Most sides are well recorded.

Interpretation A
Fidelity of Recording A

The Kyriale Chants. Ten albums of the Gregorian Chants of the "Ordinary of the Mass and the Requiem" have been issued by the Gregorian Institute of America, 402 Madison Avenue, Toledo 4, Ohio. I have listened to five disks taken from different albums. The singing, principally by seminary choirs, is reverent and authoritative; the recording, consistently good; surfaces, slightly audible. The sets contain 4, 5, or 6 records and range in price from \$6 to \$8.50. Suggested, particularly, for educational purposes.

Interpretation A
Fidelity of Recording A

Sacred Songs. Dorothy Maynor (soprano). 6 sides, Victor Set 1043. \$3.50. Faults are evident in Miss Maynor's singing of these beautiful songs by Bach, Mozart, Handel, Mendelssohn. Poorest side appears to be a re-pressing of "Now Let Every Tongue Adore Thee," Victor 18166.

Interpretation B
Fidelity of Recording A

LIGHT AND FOLK

Ball: *Album of Memories*. Blanche Thebom (mezzo-soprano). 4 sides, Victor Set SP 7. \$1.75. Miss Thebom is out of her element in these "grand old Irish-American ballads".... "Love Me and the World is Mine," "I'll Forget You," "Mother Machree," etc.

Interpretation B
Fidelity of Recording A

Romberg: *The Desert Song*—Excerpts. Dennis Morgan (tenor). 4 sides, Columbia Set 260. \$2.75. By concert standards this rising movie star fails to reach the zenith.

Interpretation C
Fidelity of Recording B